

Desert

Magazine of the

OUTDOOR SOUTHWEST



DECEMBER, 1960

40 Cents

Publisher's Notes

Desert Magazine's loyal readers once again have started our Christmas gift subscription program toward what appears to be another record. Few magazines in the world enjoy the responsiveness that *Desert* can claim.

The highest endorsement that a reader can give *Desert* is to think enough of the magazine to want to send it to a friend as a Christmas gift. Happily, we have had thousands of these best-of-all-endorsements already this season and thousands more will be coming in before Christmas Day arrives in a few weeks.

* * *

This month's *Desert Magazine* concentrates on the southern Arizona and northern Sonora areas. For those who like their wide-open spaces garnished with saguaro-studded valleys, abrupt lava cones, and deep-torn canyons, the section of the Southwest that we feature this month represents the best of the desertland.

Those who like to travel will be especially interested in the new Mexican highway that starts at Mexicali, cuts across toward the pleasant Sonoran village of Santa Ana, and there connects with the highway that leads south to Hermosillo and Guaymas.

I plan to be on the road the day after Christmas, to wander a few days through the vast vistas of upper Sonora.

* * *

It is appropriate at this Christmas season to honor the memory of Eusebio Kino, who died 250 years ago, yet whose name is becoming ever more strongly associated with the area he helped to Christianize in the late 1600s and early 1700s.

This month's Kino story tells of a man who was more than a missionary. He was, first of all, a man. He had to be to traverse the wastelands as he did, accomplish the work he did, leave the history he did in a land that was barren, hostile, and primitive. This padre was exploring Pimeria Alta about the time Philadelphia was founded.

* * *

One of our articles carries us far ahead of Kino into the earlier pre-literate ages when a vast Indian colony dwelt in upper Mexico. Today the remains of their culture are being uncovered, dusty layer by dusty layer, at Casas Grandes.

And to bring us up-to-date, we also tell you about Dude Ranches. I wonder if the archeologists of the 2200s will dig in the sites of ancient dude ranches and form their opinions of us from the incinerator ashes and bottle tops.

* * *

This month the Desert Gallery has a one-man show by John Hilton, noted artist, rasp-voiced singer of Western ballads, and raconteur. The public is welcome.

Cordially,

CHUCK SHELTON
Publisher

Contents for December, 1960

Volume
23

Number
12

Desert

--magazine of the Outdoor Southwest--

Special Commemorative Issue

On People and Places In

PIMERIA ALTA

(modern-day Southern Arizona and Northwestern Sonora)

Explored, Mapped, Christianized and Colonized By

Eusebio Francisco Kino

the 250th anniversary of whose death will be marked
throughout the Saguaro Desert in 1961

Cover

Tucson artist Ted DeGrazia uses candles on the outstretched arms of a cholla cactus for outdoor Christmas decorations. Photo by Peter Balestrero of Western Ways Features. For a story on DeGrazia, see page 22. His painting, "Papago Harvest," appears on the back cover.

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CHARLES E. SHELTON
publisher
EUGENE L. CONROTTO
editor
EVONNE RIDDELL
circulation manager

The First Christmas Was On the Desert



THE DAY IS perfect; the winds are gentle. The eye can sweep across hundreds of miles of strange land—a “barren” desert displaying the scars of earth’s cataclysmic beginnings and—at the same time—a touch of beauty which holds all the promise of tomorrow. Suddenly the viewer is struck by the meaning of it all. This is the special moment of desert greatness. This is the setting God chose for the birth of Christ.

Surging into the dry spiritual reservoirs of this world came the Son of God, and the spiritual fulcrum of the desert was used to pry high the destiny of mankind. God used a manger, the mother Mary, baby Jesus, shaggy Shepherds, fluttering angels and stately magi. These were the ingredients of the scenes and sounds of desert triumph!

We who come from the far north country often relate deep snow, pines and frosty window panes to the Christmas season. Actually, the first Christmas—every scene of it—was on the desert. A lonely ranch in the Borrego country or in the lands beyond Yuma, or in the treeless valleys of Nevada tell us better than a snow-laced sprig of holly what the first physical Christmas was really like.

And lo the fruitful land was a desert. There was intense joy over God’s gift on the desert. There was the giving of gifts by the magi, and heavenly song by desert shepherds. People wanted to give or do something to show their gratitude, just as the desert does in the spring with its offering of wildflowers in return for sunlight and water.

Parishioners of a certain little desert church always brought great quantities of these flowers to the altar each Sunday. One day, while hundreds of people carried bouquets to the church, a little girl cried because she had none. A priest told her to pick a weed that grew near the roadside. The girl wondered over the strange request, but did as she was told. When she placed the weed on the altar, the large green leaves glowed with a soft red light—and this became the most beautiful flower presented. Since that time, the *poinsettia* has been the special flower of Christmas. Deny, if you want, that this story is more than a folktale—but who can deny the miracle of life that creates a flower from a seed?

This same joy of surprise and gratitude is related to the indescribable something that many folks experience on their first contact with the back-country desert far away from paved roads. A peaceful aloneness pervades the wilderness. For the first time pieces of the hectic work-a-day world fit into place, tattered homes mend, world catastrophes melt away. The desert harmonizes the mind. Life is viewed in perspective. The “desert convert” now says he “understands the desert,” but perhaps he understands more. *Everyone needs a desert, a place for aloneness!*

The Bible is a storehouse of spiritual seeds stored for our use from desert experiences in Palestine. Nearly the entire background of the Bible is staged in the desert: *God is put to the test in the desert . . . Let the desert and its cities lift up . . . The desert shall rejoice and blossom abundantly . . .* and the greatest Christmas scripture of all: *Make straight in the desert a highway for our God.*

The Desert can feed many. Jesus showed the power of the desert to feed 4000 people at one time. This experience is repeated astoundingly today! The early settlers of California’s Imperial Valley saw the desert reclaimed with Colorado River water. To some, there was no significance in this work beyond the work itself. Others attacked the job as if it were a Holy Crusade—a chance to live life fulfilling a prophecy. Perhaps the demands of today’s world do not allow us a chance at the mighty work of transforming a desert into a garden . . . but the vast lands are still there for us to visit.

Many readers of this publication are devotees of back-country exploration. Jesus shows us that by taking spiritual journeys on the desert roads we can lift ourselves above the hate and tragedy of our world by renewing our appreciation and hope from within the wilderness. His footprints can help to lead us from the path of a tomb . . . to eternity.

The first Christmas was on the desert, *For God so loved the world . . .*

—Rev. JORDAN E. DETZER, minister of the Lemon Grove, Calif., Methodist Church

DATES ... from the Desert

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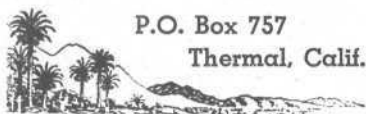
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"Desert" Is a "Pusher" . . .

To the Editor: I can remember when *Desert* was my favorite magazine, but now—I'm not sure. I am wondering just what influence has been brought to bear to make you beat the drum for the vicious drug peyote (October "News Briefs"). For officials to say it is not a narcotic because it does not lead to the agonies of withdrawal pains is just stupidity. Because the victim is ambulatory makes its effect all the more dangerous to society.

Since it is in the nature of a hypnotic with pleasurable effects, the victim becomes a tool of pushers and foreign spies. These foreign spies get control of security employees, who while under its hypnotic influence, fish out American security secrets.

The Peyote user is also manipulated to peddle other narcotics such as heroine and marijuana. While we are on the subject of marijuana let's not forget that it has also been said that marijuana is not a narcotic because it does not produce the pains of withdrawals—but it does cause violence in the nature of murder and rape. Let's not forget also that it comes from the Indian hemp, the source of hashish, and hashish was the drug which the Saracens used to make their soldiers vicious in the days of the Crusades.

Because hashish has been used in religious rituals in the Orient, does that say we should not have restrictive legislation for marijuana, hashish and dagga? Also in the Orient the poppy and its derivatives have been used in religious rites. In fact all drugs that have an effect on the mind have been used under the guise of religion. Should all narcotic enforcement be called off because all types of narcotics at some place or some time have been used under the pretense of religion?

Some churches use alcoholic beverages in communion, though the Bible says "fruit of the vine," actually grape juice. Does that mean that all alcohol control laws should be repealed?

Perhaps your article was meant to be merely news, but it had all the twisted phraseology of partisanship for the drug peyote.

Perhaps I may seem violent in my reac-

tion, but if I did not speak out against this horrible drug I would feel as if I were a traitor to my country, just as much as those foreign agents who use it to undermine our governmental workers to fish out our defense secrets.

MELISSA BRANSON STEDMAN
Morongo Valley, Calif.

(I'm sorry that you felt our five-sentence report was "twisted" and "partisan." We simply reported the fact that an Arizona court has ruled "peyote is not habit-forming or harmful, neither is it a narcotic." Those with information to the contrary should contact officials in Arizona, New Mexico, Texas or Montana where the courts have legalized the use of peyote.—Ed.)

Bodie Is A Gyp . . .

To the Editor: After reading the article on the ghost town of Bodie in the October issue, we visited the place last week. What a gyp! Everything is boarded up, and the museum is rather disappointing. Perhaps we felt this way because we visited Golden Gate Park in San Francisco and Virginia City, Nevada, before going to Bodie.

We really felt let down after that long, dusty, rough ride to Bodie—but we can say we have seen it!

MERWIN K. WARNER
Whittier, Calif.

The Hidden Meaning . . .

To the Editor: I have been amused for some years at the stuff you print as poetry, and have often said to myself that anybody could write a bunch of lines with no beginning, no end, and no meaning. Today when I read the poem by G. D. Lawrel in the November *Desert*, I said to myself: "Well—go ahead and prove it—write something."

The following is the result:

As a dream comes
Crawling o'er the sand
Hot from broiling sun
A topaz turtle
With time itself
Dragging through eternity.

It would be wonderful if these lines meant something.

ROSS H. PORTER
Monrovia, Calif.

The Real Offenders . . .

To the Editor:—Just now while I was out pulling crabgrass, I got a wacky idea. Organize an "Approved Desert Camper Club," with membership and an appropriate windshield sticker to anyone who will bring in a couple of gunny sacks of old tin cans or bottles, and take their oath to remove at least some old trash from every campsite they use.

Seriously, we camp in the desert a great



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deal, and I sometimes feel offended at the sermons you preach about trashy tourists. Look around you at the ranches, mines and desert towns. The people who live in the desert are the real offenders. Take beautiful La Quinta, for instance. A jewel of a city, but what a back yard!

If you who live in the desert foul your own nests, how can you expect the casual "weekenders" to care? Our family cares,

and do what we can to clean the places we stay. We can't always do it all, but at least leave it better than we find it.

MARGARET ANTHONY
Sierra Madre, Calif.

most everything associated with debauchery and savagery. But the white man has made no allowance for the Indians' efforts to protect his people and hold his homeland against great odds and superior weapons.

The white man looks down on the Indian for some unexplained reason. Those who claim to "know" Indians take it for granted that some mysterious law of life made them superior to the Indian people—or any other dark skinned race, for that matter.

Is it because of religion? Can it be that the white man is more intelligent? richer? has better laws? In most every Indian camp or village or community the inhabitants observe the rights of others without threat or punishment.

Is it because the white man is braver? He had rifles, cannons and side-arms; the Indian fought with war clubs, arrows and primitive know-how. The white man took the best land, and gave in return the "blessings" of disease and firewater.

Is it because of color? There is nothing special about the white man's pink skin—it seldom appears on other than the bellies of certain animals, toads and some insects.

JIMMIE JAMES
Portland, Oregon

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Man's Place in Nature . . .

To the Editor: Bessie Simon's letter to the editor (August '60), made me realize how easily misunderstanding can arise:

Dr. Jaeger's article in the May issue on Hercule's Finger is unique, as is the author. The article tells the wonderfully inspiring natural history of an area, and then the unnatural tragedies that also occurred there. True, some incident might well be forgotten—but ignoring the past often leads us to make mistakes over and over again. In short we have learned nothing from our errors. This we do not want. We do not want to feel guilty about our historical past, but instead, let's learn from it.

If you knew Dr. Jaeger as I do, you would quickly realize that he is not only "very gracious and kind," but there is much more. There are few men like him today who have so unselfishly given of themselves to point out how important nature's message actually is. The greatest portion of his life and money have gone into the preservation of natural areas and the teaching of others to more fully appreciate and protect our God-given wonders.

We cannot ignore man's associations with nature, past or present, good or bad, nor do we want to—but we must keep the proper perspectives in sight.

ROBERT T. NEHER
Chairman of the Department of Biology
La Verne College
La Verne, Calif.

Water from the Desert . . .

To the Editor: I would like to correspond with anyone interested in new and unusual methods for securing water in the desert. One method seemingly never thought of before is to obtain water from rocks, soil, fleshy plants, etc., by heating them over a fire. I have often obtained water from dry soil and powdered rock in this way over the kitchen stove. Some of the salts in dry desert lake beds, borax especially, are very rich in chemically combined water. One could build a fire under a boulder and wipe off the moisture condensing on the boulder with a clean cloth, wringing out the moisture into a clean container. But a metal container still will be preferable and practically indispensable when heating loose soil.

For thousands of years people have been dying of thirst in the desert. Loss of all one's water from a punctured or overturned barrel or canteen has long been a favorite topic for the fiction writer—yet such water could easily have been reclaimed in the above manner. Can anyone calculate how many thousands of lives have been lost through ignorance of this simple technique?

THEODORE B. DUFUR
4012½ Portola Ave.
Los Angeles 32

The Indian Controversy . . .

To the Editor: Will T. Scott (October "Letters") should remember that the Indian was given the right to buy liquor only a few years ago. Up to that time there were always plenty of white men around willing to sell the Indians a quart of cheap 59c wine for \$5.

MRS. SETH ALEXANDER
Needles, Calif.

"Injuns" and White Trash . . .

To the Editor: Mr. Scott failed to mention the fact that it is the whites who sell the liquor that degrades the Indians. I am reminded of what a well-educated Iroquois Indian once said: "There are Indians and there are Injuns—also white people and white trash. We should strive to uplift our brothers of different color—not degrade them."

MRS. WILLIAM SPENCER
Kingman, Ariz.

An Indian's Answer . . .

To the Editor: In answer to Will Scott's letter:

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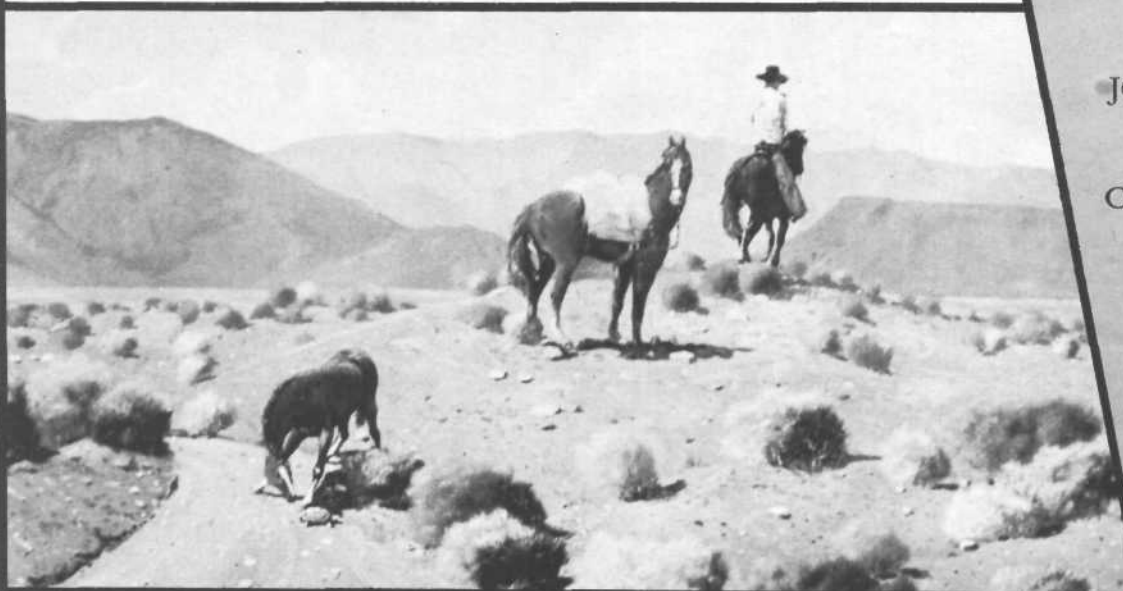
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Plugging the Cultural Gap

An Eminent University of Colorado Anthropologist
Discovers the Missing Land Link Between the Great
Civilizations of Central Mexico and the Southwest

By ROBERT H. LISTER

THE AMERICAN Southwest's Mexican heritage is conspicuous at first glance. Place names, cuisine, clothing styles, and summertime fiestas make this south-of-the-border background evident. Enrichment of the local culture through several-centuries-old Mexican contact has made the Southwest unique.

For some years scientists working with Indian groups still residing in the vivid angular lands of Arizona, New Mexico and Colorado, or with the archeological remains of the ancestors of these Indians, have been of the opinion that there were other and more significant Mexican influences in the Southwest predating Spanish conquest. From American Museum of Natural History excavations conducted at the turn of the century in Chaco Canyon, New Mexico, came a few

copper bells, macaw feathers and skeletons, and cloisonne work which were not at home in the material culture of the ancient Pueblo Indians. Elsewhere similar discoveries of such unusual articles were being recorded.

The most logical source of these exotic items was Mexico, and so it was postulated that 11th Century Indians of Mexico had carried on occasional trade with contemporaries hundreds of miles to the north. Such contact was thought to have been negligible, and not directed by Mexican Indians actually trekking so far beyond their accustomed range. Rather, specific merchandise presumably was passed through intermediaries until eventually it came to be used and discarded in towns like those of Chaco Canyon in northern New Mexico.

In the late '20s archeologists working in the drainages of the Gila and Salt Rivers of southern Arizona discovered that in that area there once had lived

a thriving group of prehistoric Indians who also seemed to have shared many traits with peoples of central Mexico. They had used ceremonial ball courts, mirrors made of iron pyrites, stone paint palettes, copper bells and other things strikingly similar to items found in Mexican ruins.

Although these Gila basin folk, called Hohokam by the archeologists, were approximately contemporaneous with the Pueblos to the north, their particular kinds of Mexican traits did not spread further northward in any quantity.

It seemed apparent then that in prehistoric times there had been influences coming up from south to north to both the Pueblo and Hohokam.

Still, there were some fundamental questions about the cultures of the Old Peoples of the Southwest, the answers to which also seemed to be hidden in the archeology of Middle America. For one thing, all the in-



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habitants of the Southwest, from perhaps a few centuries before the time of Christ up to the time of first white contact, had been farmers. This is a provocative facet of the prehistory of the area because it is a recognized fact that most of the early great cultures of the world—for example that of Mesopotamia, or Egypt, or Peru—had their footings in arid land agriculture.

In the Southwest was a rare opportunity to trace step by step the evolution of such a culture which con-

where planted, the crops were the same: corn, beans and squash.

Civilization was believed to be of greater antiquity to the south, and furthermore was founded upon the cultivation of those same nutritious three—corn, beans and squash.

Thus, it was hypothesized that Southwesterners had received the idea of farming, and probably certain plants—especially corn—from that southern source.

Furthermore, it was considered axi-

west from Mexico, might not also have come the idea of pottery-making? Was it just coincidence that both seemed to have appeared in the Southwest at approximately the same time?

Most Southwestern archeologists came to accept the view that agriculture and pottery-making, both of which were fundamental to Southwestern cultural development, were borrowed from Mexico. Two periods of contact were felt to have existed, the earlier bringing farming and the first pottery, the later introducing a variety of elements including ball courts, copper ornaments and certain techniques for decorating pottery.

How these culture elements reached the Southwest became the big question.

If a series of contemporaneously occupied archeological sites distributed between Mexico and the Southwest could be located, they would answer the question. In the 1930s and 40s, archeologists sought such evidence along the west coast of Mexico and on the great central Mexican plateau—but to no avail.

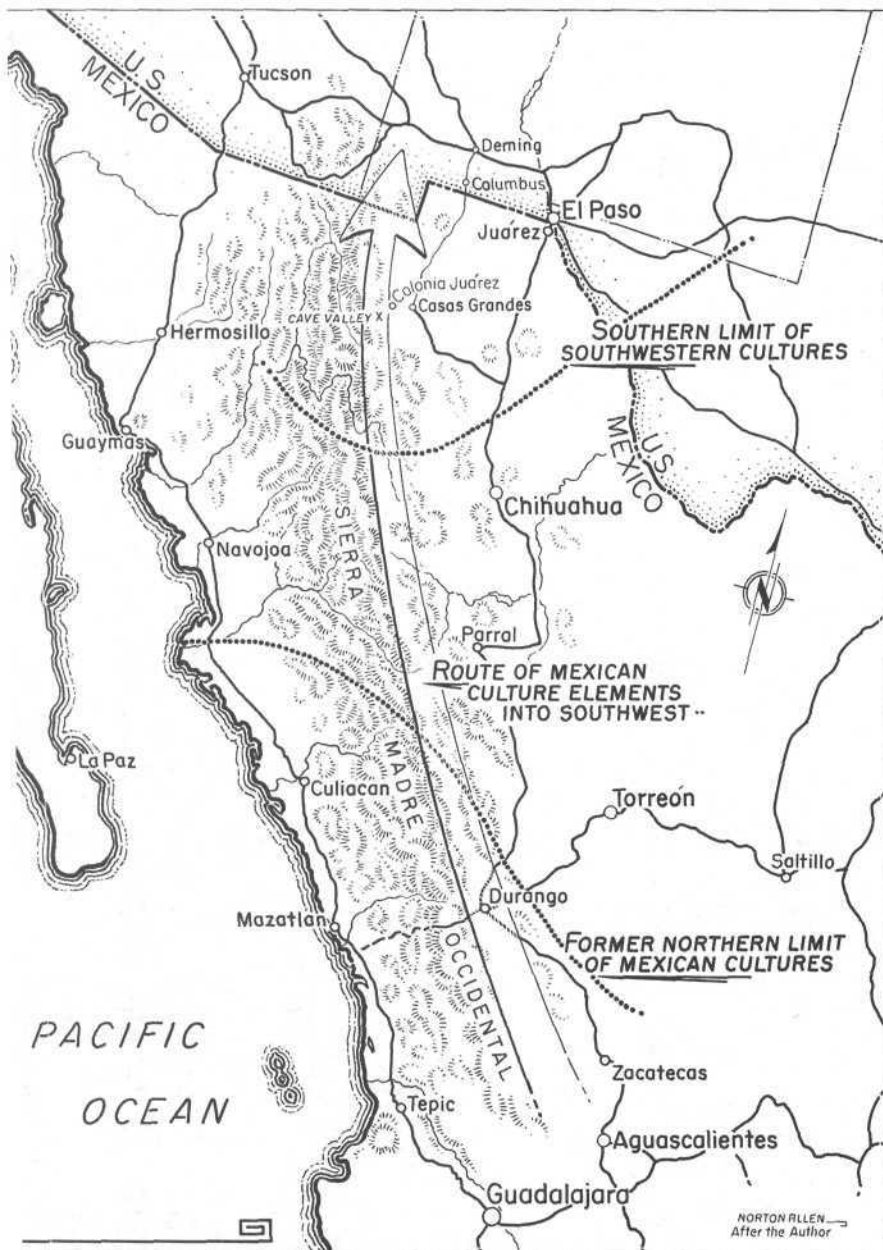
Ruins yielding remains of Mexican-type culture were traced northward into the states of Zacatecas and Durango in central Mexico and up the west coast as far north as Sinaloa. Southwestern-type culture was followed into Mexico only a hundred miles below the border in Chihuahua and Sonora.

An apparent gap of from three to five hundred miles existed between the two cultures.

Americans are gap fillers. Someone merely needs to point to a gap in a specific field of study, and there is a rush to plug it. (Note the popularity of "missing links"—a reflection of this desire to fill gaps.) With the termination of World War II the time was ripe for filling yet another gap. A number of scientists, including myself, went to work upon the problem of hoary Southwestern-Mexican connections.

I chose to attempt to locate the route by which the early contact had occurred, that trail by which agriculture and pottery-making reached the Southwest.

Where once that bloody-handed renegade, Pancho Villa, had mocked the authority of two nations, we now sought solution to our academic problems, hoping either to extend the known limits of Southwestern culture southward or to encounter Mexican traits north of their established realms. Our aim was to comb the pinnacled



ceivably would have assumed greater heights had not Europeans intervened.

In some places our prehistoric Southwestern farmers had depended entirely upon rain or run-off water to provide moisture for their fields. Other areas lent themselves to rather extensive irrigation projects. No matter

omatic that when people gave up their roaming ways and were forced to become sedentary in order to care for their crops, they began to make containers of clay. Obviously, because of bulk and fragility, pottery was impractical for nomads. If the concept of agriculture came to the South-



CLIFF DWELLINGS SUCH AS THIS WERE ENCOUNTERED IN CAVES IN CHIHUAHUA AND SONORA. THEY WERE BUILT AND OCCUPIED BY LATE PREHISTORIC PEOPLES WHOSE CULTURE WAS LIKE THAT OF OUR SOUTHWESTERN INDIANS. PROFESSOR LISTER'S PARTY DUG BENEATH SUCH STRUCTURES SEARCHING FOR EVIDENCES OF EARLIER OCCUPATION.

deeply-furrowed Sierra Madre Occidental straddling the Mexican states of Chihuahua and Sonora for clues of man's presence there prior to the late prehistoric period when cliff dwellings had been built in numerous caves in the conglomerate cliffs. What we hoped to find were deposits beneath the Pueblo cliff dwellings which might yield some evidence that man had passed that way at a still earlier time, bringing with him his valuable knowledge of both farming and ceramics.

Some authorities considered it unlikely that such material would be found in those mountains, for they are among the most rugged and difficult of access in the Western Hemisphere.

In modern times the Sierra Madre forms such an awesome barrier to east-west communication that they remain unbreached by highway or railroad.

However, a study of topographic maps revealed that this chain of mountains is gashed by a series of north-south canyons.

Modern-day Indians move freely through the sierra on foot, avoiding both the humid coastal plain and the sere central plateau. It seemed highly possible, therefore that in prehistoric days the well-watered elevated mountains would have provided a corridor rather than a blockade for movements of indigenes.

With the aid of a small group of university students, I launched upon a campaign to attempt to retrace the hypothetical diffusion wave—moving against its postulated current, that is from north to south. In mid-July we parked our loaded station wagons along the main street of dusty Casas Grandes, Chihuahua, and began inquiring for a guide to lead us into the mountains.

It was our great good fortune to obtain the help of several Mormon lads from the nearby settlement of Colonia Juarez. This outpost of our countrymen dated from the 1880s when the United States began enforcing an old law against polygamy. Many Latter Day Saints church members loaded household goods into creaking wagons and chose to live out their lives in a foreign land. Although they suffered through the various vicissitudes of Mexican suspicion, revolution and religious bias, Mormons still live some 5000 strong in a leafy oasis at the eastern skirt of the Sierra Madre. They know the mountains well, for the fertile upland valleys have provided haven and sustenance on many occasions. They know, too, of the antiquities, for many of them out hunting or on a picnic have explored the vacant dwellings in the caves. With confidence, we placed ourselves in their care.

First, we were told that our low slung cars could get no further than

Colonia Juarez. The road leading into the uplands was a pre-Revolution railroad bed deeply rutted by lumber trucks. Passage could be gained only by truck or horse. Since our immediate destination was some 40 miles away, we chose the former. The vehicle our guides provided turned out to be an obsolete and very much used army weapons carrier, without sides or top. On to this we piled camp gear, digging equipment, food for three weeks, 10 adults and my two young sons.

Next, we learned that our guides, who were also farmers with crops to be harvested, could not remain with us. They would deposit us in the valley where we wished to begin our work and would return three weeks later to bring us back. If we exhausted our store of food, or needed emergency help from a doctor, it would indeed be unfortunate.

Cave Valley, site of our excavations, is a small enclosed valley drained by the Rio Piedras Verdes, once the scene of another Mormon community but now the location of a tiny cluster of Mexican farms. As its name implies, there are some eighteen caves along the faces of encircling cliffs, most of them housing stubs of walls and storage chambers built long before the coming of the white man. However, we were seeking evidences of earlier occupation. So once we had set up camp by the stream, we began to dig beneath those walls, in the soft deposit of ash and refuse in the rear of the caves, and along the talus spilling down cliff fronts. Some caves had been put to use as sheep corrals by the Mexican settlers, making excavation highly odorous.

We unearthed ancient burials now reduced to bones lying in the dry earth.

Grimy pieces of broken pottery, moldy fragments of textiles, rough flakes of stone tools, and scattered bits of withered gourd rind or diminutive corn cobs came from the deposits upon which the later houses had been erected. As is the case with most archeological excavation, analysis of



our findings had to await laboratory facilities.

Late summer is the season of torrential rains in northern Mexico. Nightly showers began soon after our arrival in Cave Valley and steadily increased in length and intensity. Our food supply dwindled in direct proportion to the rise in the river across which our Mormon friends had to come. Dark thoughts of their inability to return haunted us all the final week. But faithful to our trust, in they roared just as we were about to spread our last can of corned beef on some locally-procured day-old leathery tortillas.

For two following seasons I conducted more excavation and survey work in the Chihuahua-Sonora mountains. Later, for two additional periods, work was carried out farther south along the mountain chain in the state of Durango. Meanwhile others were working sites dating from later horizons in Durango, Nayarit, and Chihuahua.

Results of all this work still are being digested, but I can state that it seems probable there were at least three impetuses seeping northward from the regions of high culture in central Mexico.

The first such cultural impulse brought with it not only the concept of agriculture but a specific food plant, corn. This plant seemingly had been domesticated from blends of wild grasses somewhere in northern South America or Central America. Its earliest dated appearance so far known in the Southwest is at a site called Bat Cave near Magdalena, New Mexico. Small cobs of pod corn recovered there are thought to be from a time several thousand years B.C. The cobs we took from Chihuahua cave trash were strikingly similar, but although primitive, were definitely related to modern races of corn still raised in the vicinity.

Much of this corn from both Bat Cave and the Chihuahua caves came from excavation levels containing no pottery.

Thus, agriculture and pottery did not always travel hand in hand, and in this instance, agriculture was much the older complex.

It was not thought that hunters and gatherers were overnight transformed into farmers concerned with sun, water and seasonal change. Instead, the shift from unsystematic but continual search for food, to planted crops with fair predictability, must have

been so gradual that little change in lifeway would have been apparent for centuries. Here and there a patch of corn may have been sown, its surplus stored in underground cists to which owners returned periodically. But in the end, man's desire for security brought about more reliance upon purposefully planted foods, and the necessary self-discipline to reserve seed supplies. Then it was imperative to adopt a fixed abode—to settle down.

Only then did man replace his containers of hide and fiber with the more practical but fragile pottery.

Presumably, hundreds of years after agriculture had been diffused northward came the notion of true ceramics (pottery hardened through firing to make it impervious to liquids). The oldest pottery thus far known in the American Southwest, dated about the time of Christ, occurs in southern New Mexico among a culture called the Mogollon. Our Chihuahua pottery from the caves proved to have been made by the Mogollon people also but at a later time, approximately 900 A.D. We still have not found the primitive forms of this Mogollon

pottery tradition in northern Mexico, but there can be no doubt but what it is there, lying deep in some refuse deposit. Perhaps pit house villages built on open ground along the foot of the sierras will produce such specimens. Plain brown pottery of the earliest Mogollon types present north of the border is widely distributed through the mountain corridor into central Mexico.

The third prehistoric wave of influence from Mexico was that of the 10th and 11th Centuries when certain forms of architecture such as the platform mound and ball court, pottery shapes and design motifs, and specific items of material culture moved northward. Sites of the Chichihuities culture of Durango are shown to have been a possible source for the Hohokam of Arizona. A great ruin at Casas Grandes, now being excavated, is proving to be a hybrid where Mexican and Southwestern culture of this period met and to some extent blended.

The geographical gap between the ancient Southwest and Mexico is now virtually closed, or better yet, shown to never have existed. ///



A TEST TRENCH IS STARTED IN A FLOOR OF A CAVE IN CAVE VALLEY. ALL DIRT IS SCREENED IN ORDER TO RECOVER EVERY SCRAP OF ARCHEOLOGICAL MATERIAL.

The 'Dig' At Casas Grandes

At the Prehistoric Cultural Crossroads Was the Trade Center of Casas Grandes, Today Site of Important Archeological Detective Work—and a Growing Tourist Trade

By W. THETFORD LeVINESS

AN ARCHEOLOGICAL project of tremendous proportions is now underway near Casas Grandes, in northern Mexico. It is called the Joint Casas Grandes Expedition, and is sponsored binationally: by the Amerind Foundation of Dragoon, Arizona; and by the *Instituto Nacional de Antropología e Historia* of Mexico City. Operations began in 1958 and are expected to continue through much of 1961.

In charge of excavations is Dr. Charles C. DiPeso, Amerind's tall, genial director. He was chosen to head the Casas Grandes digging because of his past record in uncovering ancient civilizations in the Desert Southwest. At such Arizona sites as Babocomari, Quibiri and San Cayetano, he had made brilliant findings for the Amerind Foundation. A P-38 pilot in World War II, he has successfully experimented in the use of aerial photographs as an aid to archeological field work.

The Amerind Foundation specializes, as the name denotes, in the AMERICAN INDIAN. At its headquarters in Texas Canyon, east of Tucson, there is a well-integrated museum of archeology and ethnology. The collection, both in storage and on display, is solely concerned with Indians of the Western Hemisphere—past and present.

Discoveries at Casas Grandes throw much light on migration and trade in the southwestern United States and northern Mexico in prehistoric times. Spanish chroniclers as early as the 16th Century were impressed with the great magnitude of the structures there, even then in ruins. They gave them the name they are still known by—"Casas Grandes" in Spanish means "Large Houses."

They lay for the most part forgotten while the region called the Casas Grandes Valley was settled. Some of the Indians who were there when the first Spaniards arrived—Sumas, Janos,

Jacomes and a few Tarahumaras—were converted to Christianity, and missions were erected among them.

One of these missions was San Antonio de Casas Grandes, known familiarly as *el convento*. Franciscan friars built it in the late 1660s, chiefly for Suma converts in the area. Located near the ruins now under study, this church grew as a religious center and became important indeed after the 1680 rebellion among Pueblo Indians of New Mexico. Many Spaniards fleeing from the north sought refuge at Casas Grandes. By 1684, however, the Sumas revolted too, and with help from the Janos and Jacomes drove the Spaniards even farther south.

The *convento* was burned and some 60 people were killed. Archeologists have concentrated heavily on this structure since the Casas Grandes work began. DiPeso and his staff have dug out the church walls and found charred timbers from the choir loft. The desiccated bodies of 40 persons were discovered in one sealed room.

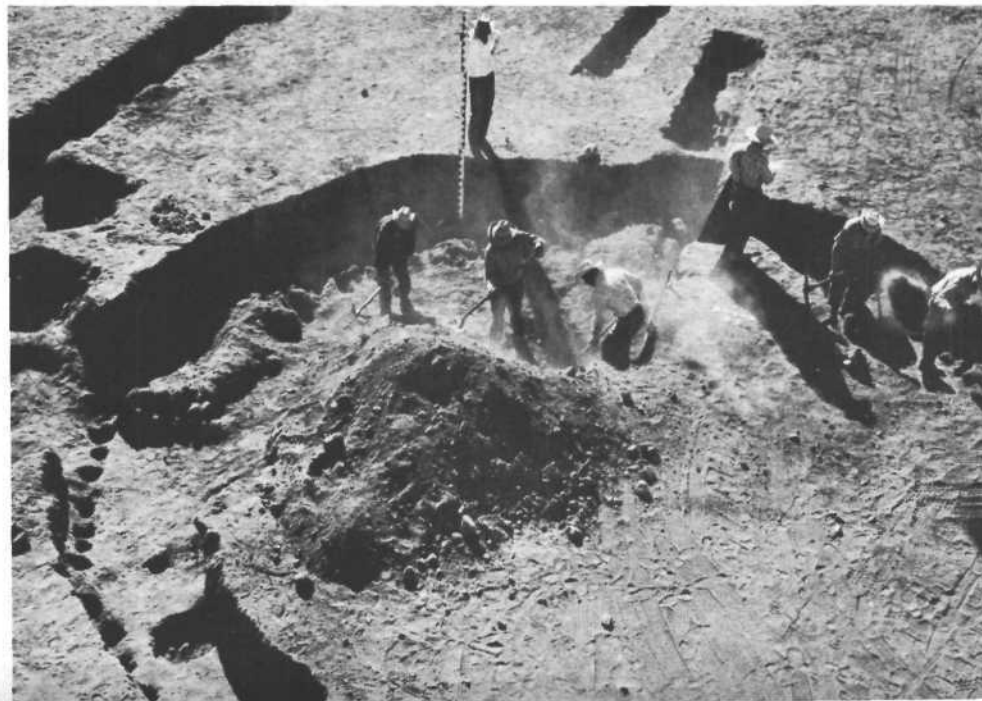
Diggers have also found a Suma village under the *convento*, and in test-

ing for this they discovered another village of pre-Suma vintage. This latter site was occupied sometime between 700 and 1000 A.D. It included pit-houses constructed around a central ceremonial edifice, stone tools, red-on-brown pottery, and random burials. Now excavated, it shows a definite relationship to what archeologists arbitrarily call "Mogollon ruins" in Arizona and New Mexico. DiPeso thinks that it could have been this pit-house culture that built the great, later structures at Casas Grandes.

As to the main ruins, A. F. Bauder visited them in the 1880s. One of the most renowned archeologists of his day, he reported on the area in some detail, calling attention to some "artificial platforms" which, from his description, seem as though they may have resembled the large and famous pyramids in the Valley of Mexico.

Archeologists came and went at Casas Grandes for the next 75 years. Pottery strewn over the surface was meticulously analyzed and found sim-

CASAS GRANDES WORKMEN UNCOVER A CEREMONIAL ROOM BURIED SINCE BEFORE 1000 A.D.



ilar to ancient ceramics of the Desert Southwest. All this time, Casas Grandes was thought of merely as a southern extension of the culture of New Mexico and Arizona.

This thinking changed considerably in the early 1950s. DiPeso and others, working along the Salt River in southern Arizona, discovered ball courts strikingly reminiscent of those known to have been used for religious games in ancient Mexico and Guatemala.

"It was soon observed that Casas Grandes lay between two great concentrations of pre-Columbian culture," said DiPeso. "These were of the Southwestern United States and southern Mexico. We had to dig at this 'crossroads site' to further our research into the big question of Middle American influences in the north."

New theories are slowly emerging. In addition to the pre-Suma and Suma occupations of the *convento* site, two eras of occupation of the main ruins are now presumed. The first, in the Pueblo tradition of the Southwest, had dwelling places of adobe; the pottery found is all of this habitation. The second was Middle American; this culture had adobe houses too, but it also included huge ceremonial structures of stone. An I-shaped ball court has been dug to its original dimensions. One of the buildings described by Bandelier as "artificial platforms" has been identified as a pyramid—the closest structure of this kind to the borders of the United States.

DiPeso won't yet hazard a conclusion as to the era Casas Grandes flourished, but the record becomes clearer as the work progresses. He is fairly certain that some Middle American people—he doesn't specify the tribe—moved in on a Pueblo group which had been there for several generations. Both peoples occupied the city simultaneously around the 14th Century, when it was apparently a lively trade center between the cultures to the south and the civilization of the Southwestern United States. In 1565 a Spanish historian, Baltasar de Obregon (b.1544), stated that a tribe from across the Sierra Madres had vanquished Casas Grandes some time before. How Obregon knew this is not given, but DiPeso has visited the remains of many ancient habitations in areas adjacent to Chihuahua and thinks the chronicler referred to the Opata Indians of Sonora.

Casas Grandes is in northwestern Chihuahua, 125 miles due south of Columbus, New Mexico. The road from this border outpost hasn't been improved since Pancho Villa's mount-

ed raiders used it in 1916, but there is an all-paved route for fast auto travel—from El Paso, Texas, down the Pan-American highway to a junction north of Chihuahua City, then northwest a couple of hundred kilometers from there. The Mexican government requires tourist permits for Americans making the trip. These are available at \$3 each at the *Aduana* in Ciudad Juarez, just across the Rio Grande from El Paso. Permission to take the car into Mexico can be obtained there free of charge; and special insurance, available by the day, is on sale at a private agency across the street.

Once in Casas Grandes it's just a five-minute trip to the ruins. They cover 237 acres near the Rio Casas Grandes. A central courtyard measures 40 x 100 meters. Automobiles may be driven through the actual streets and plaza of this prehistoric city, where stabilization and repair during the past two years have restored it to a remarkably authentic 14th-Century appearance.

The vicinity of Casas Grandes is

predominantly a mining area. The ruins are near the city, Casas Grandes, which Spaniards settled in colonial times; twin spires of its baroque Catholic church may be seen from the "dig." Several nearby towns, notably Colonia Dublan and Colonia Juarez, were settled in the 1880s by Mormons fleeing the stern antipolygamy laws of Arizona and Utah.

A railroad from Chihuahua City by-passed colonial Casas Grandes, so a large modern city, Nuevas Casas Grandes, sprang up in its wake. DiPeso has an office and research center there, with some artifacts from the ruins on display.

The excavations have made the whole Casas Grandes Valley a tourist attraction, and an economic "boom" has hit the place. There are several hotels along the railroad in Nuevas Casas Grandes. One block west, north toward Colonia Dublan, is the "Motel Casa Grande," a thoroughly up-to-date auto court with a restaurant serving food popular in both Mexico and the United States. ///

Desert Quiz

There are 35 national monuments in the National Park Service's Region III—a vast area encompassing most of the Desert Southwest. Listed below are 20 of these monuments—and descriptive lines which best fit each one. If you can match 11 to 13 monuments with their correct descriptions, you are doing "fair"; 14 to 17 is "good"; 18 or better, "excellent." Answers are on page 31.

DESCRIPTIONS

1. Forest of giant cactus and spectacular desert vegetation.
2. Walled villages and watchtower built by prehistoric Indians.
3. Cavern system containing intricate and beautiful formations.
4. Spectacular dunes of pure white gypsum.
5. Three gigantic bridges of sandstone in a region of superb scenery.
6. Huge arches and immense windows carved by nature in colorful red sandstone.
7. The largest and most majestic stone arch known to man.
8. Beautiful canyons containing cliff dwellings and pueblo ruins.
9. Unusual natural display of desert plant and animal life.
10. Well preserved old Spanish colonial mission.
11. Ancient and recent evidences of Indian occupancy in spectacular red canyons.
12. Ruins of frontier Spanish missions and pueblos abandoned in the 17th-Century.
13. Rock faces exhibiting a myriad of shades and tints at an elevation of 10,000 feet.
14. A series of small but unusually beautiful underground chambers.
15. Picturesque Mormon fort and frontier outpost.
16. Symmetrical cinder cone surrounded by interesting evidences of volcanic action.
17. Ruins of the key fort that shaped Southwest destiny, 1851-91, on the Santa Fe Trail.
18. Massive cliff-rock bearing historic inscriptions dating back to 1605.
19. Intricately carved, brightly colored rocks and awesome cliffs and canyons.
20. Grotesque rock formations in a forest-covered desert mountain range.

NATIONAL MONUMENTS

- | | |
|-------------------------------|------------------------------|
| A. Arches (Utah) | K. Gran Quivira (N. Mex.) |
| B. Bandelier (N. Mex.) | L. Lehman Caves (Nev.) |
| C. Canyon De Chelly (Ariz.) | M. Natural Bridges (Utah) |
| D. Capitol Reef (Utah) | N. Organ Pipe Cactus (Ariz.) |
| E. Capulin Mountain (N. Mex.) | O. Pipe Springs (Ariz.) |
| F. Casa Grande (Ariz.) | P. Rainbow Bridge (Utah) |
| G. Cedar Breaks (Utah) | Q. Saguaro (Ariz.) |
| H. Chiricahua (Ariz.) | R. Timpanogos Cave (Utah) |
| I. El Morro (N. Mex.) | S. Tumacacori, (Ariz.) |
| J. Fort Union (N. Mex.) | T. White Sands (N. Mex.) |

Eusebio Kino, Southwest

Explorer, cartographer, missionary and colonizer, he pushed the boundaries of Western Civilization northward to the Gila River of Arizona

By WELDON F. HEALD

MARCH 15, 1961, should be a day when we Desert Southwesterners pay homage to one of our truly great pioneers. That date marks the 250th anniversary of the death of Father Eusebio Francisco Kino, who penetrated the awesome arid wilderness of northern Sonora and southern Arizona and almost singlehandedly planted the seeds of civilization here.

Where Father Kino went, divided highways now follow.

Prosperous towns and cities stand today where he tarried to preach Christianity to the Indians.

Dauntless, fearless and indefatiga-

ble, his heroic, black-robed figure looms large in our past as a Man of God and a Man of Action.

But what is planned by way of celebration on March 15th to honor our most distinguished founding father? I recently decided to find out. I could visualize a color-splashed series of pageants, Indian ceremonials, Mexican fiestas and High Masses—even perhaps a commemorative stamp issued by the Post Office Department; 1961 would be a Kino year in Arizona, for sure.

The Tucson area was the scene of much of the great Padre's spiritual and

temporal labors, so I called on five organizations which represent the religious, cultural, economic and tourist activities of the city. At the first I was told that they knew of no plans whatever. The priest at San Xavier del Bac, Kino's most famous mission, said no particular observances had been scheduled. The mission is now Franciscan and Kino was a Jesuit, which may be taken as a partial explanation for the lack of planned ceremony. At Saint Augustin's Cathedral they said that it was too early to know; and at the fourth place I was informed that nothing had been planned.

I called the office of the tourist organization and the personable young secretary offered to help me—but as she had never heard of Kino, she said she would have her boss call me back soon as he returned.

At this point she became a bit confused. "Father Kino," she said, "may I have a phone number where you can be reached?"

But this neglect and indifference shouldn't have surprised me. It's typical. The sole "Kino" listed in encyclopedias is an astringent drug obtained in East India. And only three rather insignificant Southwestern geographical features are named for him—Kino Bay and Puerto Kino on the Gulf of California coast of Sonora, and the 4200-foot Kino Peak in southern Arizona's Growler Range.

North of the border there is but a single modest monument raised to Kino's memory. It stands unobtrusively in a little park back of Tucson's City Hall. The memorial was erected in 1936 and consists of an oblong block of dark lava rocks, with a bronze plaque showing Father Kino



APRIL FIESTA FIREWORKS AT FATHER KINO'S MOST FAMOUS MISSION: SAN XAVIER DEL BAC

Pioneer

striding across the desert in his long robes, led by an Indian boy. The artist was apparently unaware that he was depicting the tireless "Padre on Horseback," whose equestrian exploits equalled or surpassed those of the best cowpokes who ever raised Arizona dust.

In fact, for more than two centuries the name Kino and his activities in the Southwest were more legend than history. No picture or likeness of him had survived; no book had been written on his life; no exhaustive studies made of his remarkable achievements, nor any detailed chronicle of what he had actually accomplished. While Coronado, de Anza and Serra grew in fame, Father Kino's brilliant light became dimmer as the years went by. Then suddenly in the 1930s, three eminent historians clearly revealed the true greatness and commanding stature of this extraordinary missionary, explorer, scholar and empire builder.

They were the University of Arizona's Frank C. Lockwood, Herbert E. Bolton of the University of California, and Peter Masten Dunne at the University of Santa Clara. As early as 1919 Professor Bolton translated and edited the Padre's own narrative as *Kino's Historical Memoir of Pimeria Alta*. This monumental two-volume work gives a description of the topography, plant and animal life, and natives of northern Sonora and southern Arizona. Pimeria Alta—the "Upper Country of the Pima Indians"—was Kino's vast field of activity. It stretched 250 miles east-to-west and 200 miles from north-to-south.

But the two popular and definitive books on Kino are Lockwood's *With Padre Kino on the Trail*, published in 1934, and Bolton's *Rim of Christendom*, which appeared two years later. Both are based upon thorough research among original sources, and Bolton personally followed Kino's trails and visited the sites of all his missions. They make fascinating reading for those interested in the

background of the Desert Southwest. Father Dunne's contribution was to place Kino accurately in the long procession of Jesuit missionary priests who carried the Cross through the barbarian lands of northern Mexico to the shores of the Pacific in Baja California.

Due to this historical triple grand slam, we now know most every detail of Kino's adventurous life.

He was born on August 10, 1645, in the little Tirolese hill town of Segno, 18 miles north of Trento, Italy. The Italian form of his name is Chini and members of his family still live in the community. Young Eusebio was well educated, having attended five south German universities. His proficiency in mathematics gained him the offer of a professorship at Freiburg. But after an illness and miraculous recovery, he adopted Francis Xavier, "Apostle of the Indies", as his patron saint, and entered the Jesuit Order in 1665. From then on he burned with unquenchable missionary zeal and constantly petitioned his superiors for an assignment on the wild and perilous frontiers of Christianity.

Kino's wish was finally granted, and he sailed from Cadiz, Spain, for Mexico in 1681. His first labors in the New World were in Lower California, where the Spanish attempted to plant colonies and missions. But, due to international politics and other mat-

ters beyond Kino's control, the project was abandoned by order of the King, and he was transferred to northwestern Mexico. There, on the outer fringe of civilization, Kino established his headquarters, Mission Nuestra Senora de los Dolores, in 1687. The site is a hilltop beside the San Miguel River, about twenty miles east of the present Sonora city of Magdalena, but there is no sign of the mission today.

At that time this was the end of the road—northward in all directions stretched an utter wilderness of deserts and rugged mountain ranges, unknown and inhabited only by Indians. The region is still in a sense "Father Kino's Country", for in his 24 years of ceaseless activity he pioneered there the main routes of travel we use today, and laid the foundations for many of our leading communities.

Historian Bolton mapped 35 major journeys, or *entradas*, made by Kino through Pimeria Alta. They followed down the Santa Cruz, San Pedro, and Gila rivers westward to the site of Yuma and across the Colorado River. He also blazed the fiendish short-cut across the desert along the Arizona-Sonora line, still known as *El Camino del Diablo*, "The Devil's Highway." According to one authority, between 3000 and 4000 travelers have since died on this trail from hunger, thirst and fatigue.

Alone or accompanied by friendly Indian guides, and sometimes with a



THE KINO MEMORIAL PLAQUE IN TUCSON

small military escort, the invincible Padre rode the Rim of Christendom for God and the King of Spain. Kino's four-legged journeys were prodigious, and even his horses must have sensed the epic nature of his errands. In 1695, when 51 years of age, he covered 1500 miles in 53 days. Two years later he made a trip of 700 miles in 30 days, and in 1700 he traveled 1000 miles in 26 days, for an average of 40 miles a day. Once, between sunrise and sunset, he rode more than 75 miles in response to an urgent message from a brother priest.

But besides being one of our foremost early explorers, Father Kino achieved international fame as a cartographer, and his maps gave the first accurate delineation of the whole region. To him also belongs the credit for discovering that California is not


an island, as was supposed, and for finding a practical land route from northern Mexico to the Pacific Coast. Thus, the geographical revelations resulting from Kino's journeys were enormously important in Spain's later colonization of Alta California.

However, the great-hearted Padre made his major exploration among human souls. Wherever he went he preached to the Pimas, Papagos, Cocopas, Maricopas, and Yumas in their own languages, and 4500 Indians were personally baptized by him during his ministrations in Pimeria Alta. He established 25 missions—more than one a year—and numerous smaller *visitas* in the native villages. There he taught his converts how to plant crops of wheat, maize, beans and melons—and even furnished the Indian women with recipes for making

bread and tortillas. He also brought in the first fowl, sheep, goats, cattle and horses. In fact, Kino introduced large-scale stock raising and became Arizona's first "Cattle King," with prosperous widespread ranches totaling hundreds of thousands of acres. When San Xavier del Bac was started he was able to stock it with 700 head of domestic animals. So, for a quarter of a century on the remote frontier of New Spain, Father Kino was a builder, statesman, teacher, executive, outdoorsman, farmer, rancher, student, writer and priest all rolled into one dynamic individual. A small band of stalwart Jesuits assisted him. But there were never enough and he constantly petitioned for more.

Three Kino missions were located in the Santa Cruz River valley in what is now Arizona. First was Guevavi,




**KINO'S
TUMACACORI MISSION**
 —ONLY CHURCH
 IN THE UNITED
 STATES THAT
 IS A NATIONAL
 MONUMENT.
 THE YOUNG
 WOMAN IS
 EXAMINING A
 MODEL OF THE
 ORIGINAL
 MISSION
 LAYOUT.

founded in 1692 eight miles north of present Nogales. Devastated by the marauding Apaches in 1773, its ruins are barely traceable today. In Kino's time these savage nomadic Indians became an increasing menace from the east, and for more than 150 years after Kino's death they made large parts of southern Arizona almost uninhabitable for the white man.

The second mission, Tumacacori, established in 1697, still stands beside U.S. Highway 89, 17 miles north of Nogales. No sign of Kino's original church remains, and the present building, dedicated in 1822, is in partial ruins. Now preserved as a National Monument, Tumacacori is an impressive structure, 100-feet long and more than 40-feet wide, with massive adobe walls six-feet thick. At the monument entrance the Park Service has built a museum in Spanish colonial style, which houses exhibits pertaining to the early days of the mission and the life and travels of Father Kino. Particularly fine are the carefully executed dioramas which highlight the most dramatic events in the history of Tumacacori.

Nine miles south of Tucson stands by far the best known of all Kino's missions — San Xavier del Bac. Founded in 1700, it seemed to be closest to the Padre's heart. When there he became Arizona's first enthusiastic booster and predicted that someday a great city would rise nearby. The 1960 census figures have proved Kino to have been a true prophet. However, as at Tumacacori, he never saw the present establishment. After the Jesuits were expelled from Mexico in 1767, the mission passed to the Franciscans, who completed a new church in 1797. Called the "White Dove of the Desert," it is considered today to be the most beautiful of all Spanish missions in the United States.

Situated in a reservation of Papago Indians, San Xavier del Bac is still active, and ministers to the descendants of its original red-skinned communicants. They serve as choir, altar boys, decorators and janitors. Men outstanding for their good deeds are annually chosen as the "Twelve Apostles," and are the mission's leaders and deacons for the following year. The ceremony of their installation occurs during the Feast of the Two Saint Francis, December 2, 3 and 4. This is the mission's big fiesta and is a picturesque event worth going far to see.

Also the Tucson Festival Society has developed a brilliant pageant which is held each April at San



THE MAYOR OF SAN IGNACIO, SONORA

Xavier. There are bonfires in the plaza, fireworks, religious processions, dancing and feasting. In 1961 the festivities are scheduled for April 7th, and I hope that some special observances in honor of the mission's distinguished founder will be included. Such would be particularly fitting at San Xavier. The Papagos are peculiarly "Father Kino's People," for they have continued to this day the customs and ceremonies their ancestors learned from the great Padre.

But Iron Men are not really made of iron. On March 15, 1711, while dedicating a new chapel at Mission Santa Maria Magdalena, Kino became ill, and died a few hours later. He

was then 65 years old. History gives no details, so we can only conclude that the Good Father was simply worn out from years of constant self-sacrificing service to his fellow men, both red and white. He was buried in the chapel beside an image of Saint Francis Xavier, who had been the guiding inspiration of his life.

We have made a fetish of our early Western gunslingers. But they were second-string humans compared to the Padres when it came to courage, fortitude, stamina, toughness and just plain guts. And perhaps leading them all was Father Eusebio Francisco Kino. The word that best describes him is—indomitable. ///

THE UNFINISHED CEREMONY

WE STARTED from Oraibi on Thanksgiving eve, 1927, driving via Blue Canyon. Lorenzo Hubbell, Jr., was in the best of spirits, singing snatches of Navajo songs as we rode, and smoking a fragrant cigar between songs. We reached my old campground at sunset. The weather was superb, rocks glowing, everybody happy. At the new tent trading post we stopped for hot tomato soup. We made room in the car for an old Navajo who favored us with a traveling song. At dusk we encountered a Ford holding seven young men, not one of whom could inveigle the car to go. Mr. Hubbell blithely took it in tow as far as Cow Springs where we learned that we were a day too early for the ceremony. The jovial keeper of the post at that place joined his wife in urging us to stay with them overnight.

There was much of interest in the store. Aside from the usual rows of canned goods, bolts of cotton cloth, soda pop and notions, one shelf held treasures produced in the land — a miniature Aladdin's cave. Out of an ancient pottery bowl, the trader poured a collection of red garnets. He called them rubies. Casually he said:

"The red ants bring these gems out

of the ground. The Indians find them on the large ant hills some miles from here. Would you like to have these too?"

I accepted the stones gladly. My attention was centered on a large olla decorated with an intricate pattern in white and black. It was a prehistoric piece of pottery found in the neighborhood, representing the best period of designing of the ancient people. It brought visions of a black-haired woman carefully polishing her jar and drawing firmly with a yucca-leaf brush the pattern which flowed out of her mind, a cloud pattern created centuries before by her ancestors who used this magic to bring the rain.

Mr. Hubbell knew what the pottery meant to me. He suggested that we hunt for a piece on the site of the old pueblo nearby. We walked over the sand toward a large pond. White Mesa rose in the distance. The ground was littered with shards, but we found no unbroken pots. Walking in the clear air of that Thanksgiving Day, I spied at my feet a piece of turquoise the size of a thumbnail. It was bluer than any I had ever seen, bluer than the precious gems I wore in my ears.

"Well, what do you think of that?"

exclaimed my companion. "I never went walking with anyone who could pick up turquoise on the trail."

What a glorious Thanksgiving Day that was! When evening came we parked the car behind Navajos at the dance site. The weather was freezing cold. Mr. Hubbell wrapped the car radiator in a blanket before we walked a short distance to the scene of action. Hundreds of Navajo men, women and children were huddled about campfires which lined the sacred avenue leading from the medicine lodge to the green room where the dancers were donning their costumes. The crowd was prepared to stay until dawn.

Back of the fires was piled a barrier of saddles, blankets, sheepskins, cooking utensils and mutton. Brilliantly colored Pendleton robes caught the flare from the fires. Turquoise and silver necklaces, earrings, bracelets and rings vied with silver-coin buttons on velveteen jackets. Fur caps protected the ears of many of the men, but mostly the tall Stetson was in evidence. The audience awaited the coming of the dramatists whose stage was the avenue in front of the medicine lodge.

The Indian's ability to wait patiently and to enjoy what to us seems tiresome repetition is one of the characteristics to be acquired before one can enter thoroughly into the spirit of their lives. As I waited, thinking of how many times these Indians had been to identical affairs, I was reminded of certain white people who read Dicken's *Christmas Carol* every Christmas eve, and also I thought of our fathers who never missed a performance of *Hamlet*. Here was the same interest. The words of the songs, the actions of the dancers must be correct, orthodox and classic; and being such could not fail to get response from a people whose tradition is rich and inspiring.

At that particular ceremony the patient was a woman. She came out of the lodge accompanied by a clansman. They stood on sheepskins facing the east. The shaman advanced toward the patient followed by five mythological characters. Hasteyelte, the Talking god, led the first four dancers who were impersonating corn, rain,



"THE YOUNG BUDS RODE IN WAGONS WITH THEIR MOTHERS"

vegetation and corn-pollen. These four were partly nude, painted white, wearing silver belts and kilts with fox skins hanging from the waist. Slowly, in single file, they advanced toward the patient. She moved quietly down the line of whitened firelit bodies, scattering the sacred cornmeal on them. She repeated in a low voice the invocation the shaman had taught her:

*You who dwell in the house of dawn
In the house made of the evening twilight*

Where the dark mist curtains the doorway

*The path to which is on the rainbow
Where the zigzag lightning stands high on top,*

*Where the he-rain stands high on top
Oh, male divinity! Come to us, come.
Come with wings which are hung with rainbows . . .*

*. . . I have made the right offering;
Prepared for you a smoke.*

I have asked that the roots of the corn be watered.

Make well my feet, my limbs, my body.

*Restore my mind; restore my voice;
Today remove your spell from me.*

After the prayer, the first four dancers returned to the green room and 12 dancers came into the firelight. They held spruce twigs and gourd rattles in their hands, as they had been represented in the sand paintings. Their song was slow at first but as they proceeded, lifting their right feet in unison and balancing on their left, a fervor grew upon them. Three times they had thrilled the crowd and were expected to appear again, when an unusual quiet settled upon the audience.

"Why are they so still?" I asked.

"They are always quiet at a Yebichai Dance," Mr. Hubbell answered.

"But they are extremely quiet. I feel that something is wrong."

Then an old Navajo whispered:

"They say the women are crying."

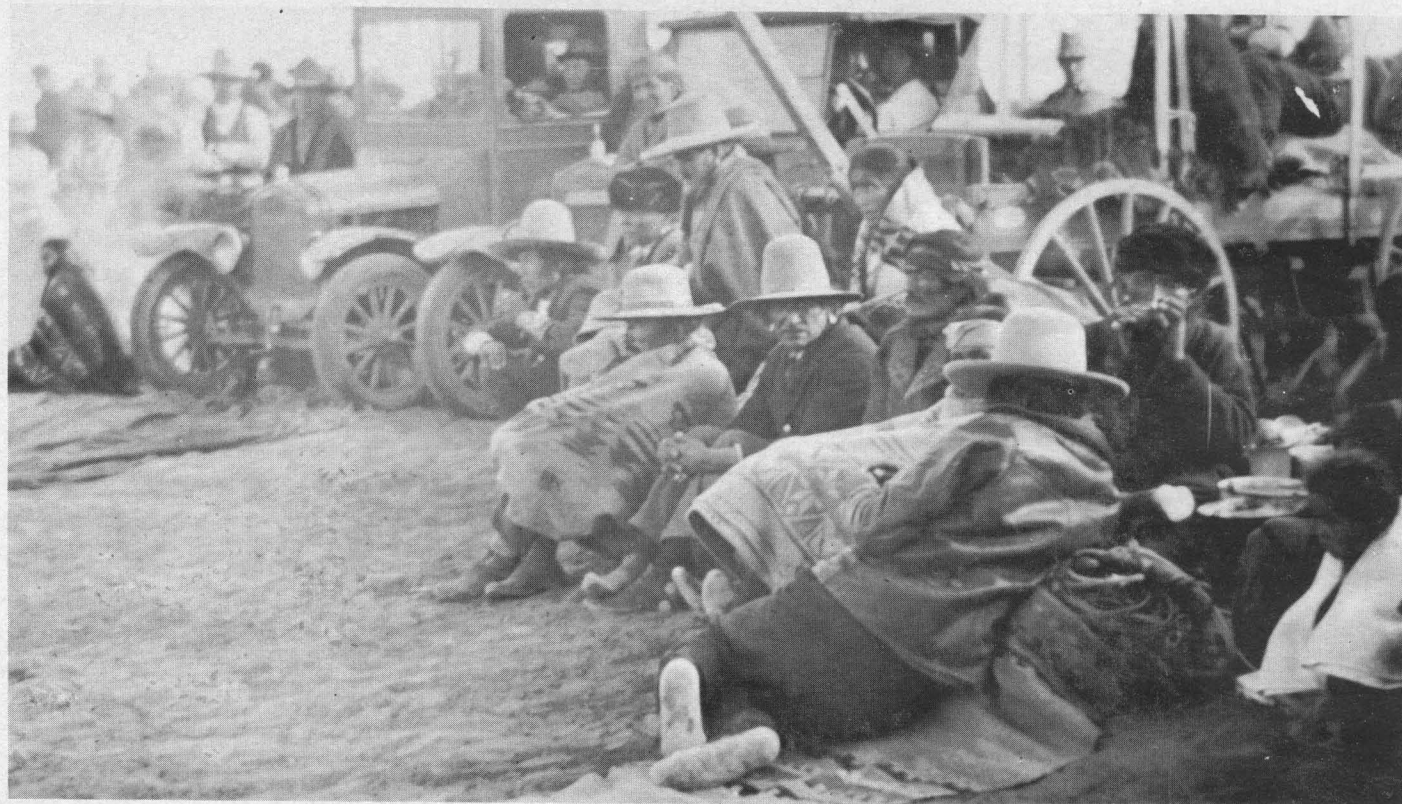
It was very cold. Wrapped in my

blankets I had drawn close to a fire where the kind people had brewed me some tea. I offered it to my Navajo neighbors. It was refused. I knew that tragedy was in our midst. The old man spoke again:

"They say her child is dead."

Not another word was uttered. The dancers did not appear again. The small son of the patient had died in his father's arms, a few feet away from where we were preparing to feast on mutton and corn tortillas. The nine days' sing with all the hopes for health, with all the terrific effort of nightly chanting and daily ceremonies, with all the expense of sheep and flour to feed the multitude was now of no avail. He who lives in the house of dawn where the dark mist curtains the doorway had not heard the prayer of the mother, or having heard had meted out the fate that is so difficult for mere mortals to understand. ///

Next installment: "I Give You Na Nai"



"THE CROWD WAS PREPARED TO STAY UNTIL DAWN." THESE PHOTOS WERE MADE BY MRS. ARMER AT THE 1927 CEREMONIAL.



◀ **Face to face** with a Mexican pinata. Popular for parties and at Christmas time, the gaily-colored figures are built around easily breakable containers which are filled with candy and favors before being hung overhead. Blindfolded children then take their wild swings at the pinata with a bat—and when someone connects the goodies spill out, and all hands scramble for the prizes.

ASH ALLEY A TOUCH OF MEXICO




◀ **Spanish dress** is popular with Ash Alley shop owners

Music of Mexico is provided by wandering musicians



Cowboy Artist

Pete Martinez  looks over the painting he did on a corrugated fence back of Catharine Noble's Mexican Imports Shop on Ash Alley. Martinez was one of several Tucson artists who contributed samples of their work on the fence.



IN THE HEART OF TUCSON

THERE'S A TOUCH of Mexico in Tucson, and it is the aim of many citizens to keep it that way. The name of the place in question is Ash Alley, a short street surrounded by neon signs, signal lights and busy traffic, one of the few places in town remaining much as it was in Old West days.

Many pioneer Southwest towns had a Mexican district, but most such areas have given way to modern design — steel has replaced adobe. These little sections were true South-of-the-Border vestiges in the New West. The houses and shops were handmade, and each had a small patch of garden growing in some nook. Chinaberry trees, castor bean plants, live ocotillo fences, and prickly pears were in evidence. Strings of red chili peppers hung from open rafters, and there was an odor of spicy cooking in the air. Lovebirds in cages and bright gerani-

ums in pots added a decorative touch. The strum of guitars accompanied strong voices in lively Spanish songs.

Ash Alley, with its old buildings and Mexican motif, is a bit of yesterday as authentic as the honkytonk, hitching rail and saloon. The shopkeepers and craftsmen of Ash Alley are trying hard to keep it that way, in spite of the threat of being swallowed alive by fast-growing Tucson.

Old adobe buildings front Ash Alley. Sold here are colorful Mexican wares, good-tasting foods, and traditional arts and crafts—leather goods, tinware, silver jewelry, serapes, rugs, baskets, and pottery. Mexican musicians provide the background music.

So much of the real Old West is gone, but happily, Ash Alley remains. ///



One Man's Southwest

the story of Tucson artist Ted DeGrazia

(See Front and Back Covers)

TED DeGRAZIA, Tucson's creative whirlwind, is one of the Southwest's leading artists—and one of its most interesting characters. He dresses as he pleases (usually a well-worn pair of jeans, an oversize sombrero); he wears his graying beard clipped close to the chin; he says what he feels must honestly be said ("I didn't come to New York to stand in line, and I'm not knocking on doors. I came here to find out if my art was any darn good!" the newspapers quoted him as saying during a recent assault on the Big Town); he works when he pleases (before he started "losing energy" he would rise at 2 a.m. and work to mid-morning); and—most importantly—he works at what pleases him (this dedicated artist's main forte—and bread-and-butter source—is oil painting, but, much to his well-wishers' consternation, he

fashions ceramics out of cactus molds, or "wastes a week" making paper cut-outs to hang on his windows in place of curtains, or repaints the walls—inside and out—of his studio; Ted also paints in tempera and water colors, does cast silver work and wood carvings, dabbles in stained glass, creates multiple-run designs for fabrics, and writes stories on Southwest Indian and Mexican lore).

On a recent visit to Tucson, I sat in the living room of Charles and Lucile Herbert (he's the pioneer newsreel photographer turned still-photographer whose work has appeared with regularity in *Desert Magazine*)

and we discussed the several DeGrazia paintings on the Herberts' walls. Here was art strongly influenced by the Mexican school: vivid coloration, flowing style, compassionate subject-matter.

"I've got more of DeGrazia's paintings in the bathroom," said Herb.

"In the where?" I asked, somewhat startled.

"Bathroom—come see." And there, painted on the shower wall, was an elongated ruffled fighting rooster (a DeGrazia trademark). Colorful birds and flowers adorned the opposite wall.

"Ted dropped by one day when we were building this place and he wanted to add his touch," explained Herb.

Next day we drove to DeGrazia's studio on the now busy intersection of

By **EUGENE L. CONROTTO**

Sketches by DeGrazia

Campbell and Prince. The cluster of low adobes here was built by the artist himself in 1944. Two old cars stood baking in the sun—no doubt the “mechanical mules” that haul DeGrazia to his favorite back-country painting spots and to his mining prospects (DeGrazia is as proud of being an amateur miner as he is a professional painter—and he mines gold the hard way: with a pan, often hauling the water needed for this operation).

Here and there on the outside walls of the studio are splashes of pink and purple—the simple but heavy lines of DeGrazia Mexicans, Indians, *burritos* and saguaros. For landscaping there are chipped bowls, pottery, mining relics, ore specimens and ordinary-looking field stones; mesquite ramadas and saguaro-rib fences.

We ducked through the open door of the salesroom.

“Ted?” called Herb. No answer. The walls were crowded with DeGrazia paintings—bullfight scenes, the frozen blur of mustangs racing across a horizontal canvas, a great circle of red and green feathers of two cocks locked in mortal combat, Indian women laden with flower baskets, a sweep of saguaro desert, a doleful Mexican lass holding a colorful but empty *pinata*, a roadrunner darting after a lizard.

I was unprepared for what came next. I had never met the artist. I knew him only through his non-conformist reputation and exciting art. I must confess that my preconceived notion was of a boastful man, slightly arrogant—an artist who probably enjoyed shocking nice old tourist ladies from Short Hills, New Jersey, with his bold Southwestern paintings. As I look back, I think this impression grew out of a widely-distributed publicity photo which shows DeGrazia with his thumbs contemptuously stuck in his work-shirt front, his chest thrust forward, a handmade cigarette dangling from sneering lips, a heavily-bearded face, a beat-up cowboy hat curled around a Napoleonic head. In summation: a desert beatnik.

In truth, however, the man is genuine. We found him in a small bare room behind the gallery, huddled monklike over a bit of wood he was carving into the image of a Papago boy. His large luminous gray eyes revealed an inner shyness, his soft voice was friendly, his manner gracious.

He left his work without a second thought. He was not interested in talking about his art or of himself—he wanted to know all about his old friend, Herb, and to what remote



TED DE GRAZIA AT THE ALTAR OF THE TUCSON MISSION HE BUILT AND DECORATED

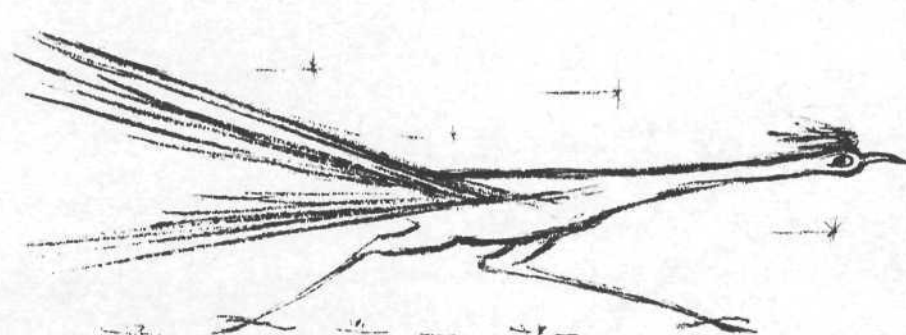
corner of the Southwest Herb's camera had taken him during the past months; he wanted to know about me, what I thought of Tucson, how *Desert Magazine* was faring . . .

But, I was there to learn about DeGrazia. Here are the vital statistics: Born at Morenci, Territory of Arizona, in 1909; in 1920 his family moved to Europe, but five years later DeGrazia returned to Arizona. “I was 16 years

old, and back in the first grade,” he is fond of saying.

“In 1932 I landed in town (Tucson) with 15 bucks in my pocket. We were having a depression, so I decided to go to college. I went broke in a couple of days and had to get a pick and shovel job at 35c an hour.”

But, DeGrazia stuck it out and





DE GRAZIA'S MISSION. TO MAKE ADOBE BRICKS, HE HAD TO HAUL WATER TO THE BUILDING SITE. "I AM A MAN POSSESSED," HE SAYS TO EXPLAIN HIS CREATIVE DRIVE.



DeGrazia's Desert . . .

THE SOUTHERN ARIZONA DESERT is a fantastic place. Many strange unbelievable things happen there. And yet many more will happen. These unusual things can only happen on the desert.

The desert is spiritual, mysterious and religious. It is a big dream around a dream. Walk away from people into the desert, and soon you will feel a deadly silence, a loneliness, a vast emptiness. It is almost frightening. Then suddenly, like magic, you are not alone. Around you is felt a stirring of life. You have a feeling of a living desert, a very old desert.

When you live on the desert, somehow you become part of it. Not until then will you begin to understand it. It is almost human in temperament. At times it cuddles you as a mother cuddles her baby, full of love and tenderness. At other times it is cruel and heartless. It goes from one extreme to the other.

The more you know the desert, the more you will love and respect it. You will always be aware that it is alive. The desert will make you feel small and unimportant, because of its giant vastness and seeming endlessness. On the other hand, it will make you feel big and important. Then it becomes so close to you that you can almost touch the mountains and feel the sky in your hands.

The big sky with its clouds helps the desert create its unusual moods. The desert moods are so strong that they effect the life upon it. At the end of the day a prolonged finale takes place. Colors come into their full splendor. Colors, sometimes in contrast, sometimes in harmony, touch the desert. They fill the whole atmosphere. There is a pause, a retarded, long, very long, pause. As though in prayer, a religious Gregorian silence descends upon the earth. It is a rosary in humble reverence to the Almighty, an End to the Beginning.

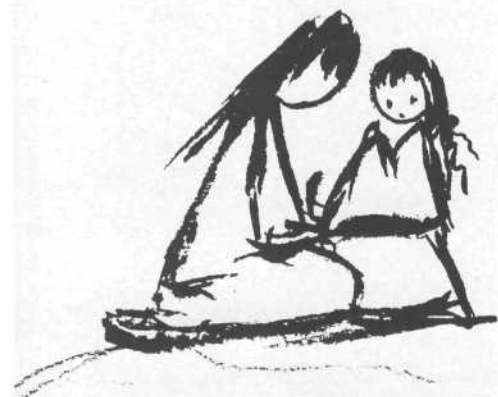
This dramatic ending of the day stirs the imagination. It brings forth an aliveness and an awareness. Dreams may come true. Adventure is a reality. It is here that the "Seven Cities of Gold" were believed possible. And it is here that they may yet be found. There is peace and quiet upon you, in the desert.—Ted DeGrazia



"APACHE INDIAN AND HORSE." DE GRAZIA CALLS THIS ART: "PAINTING IN THE ROUND."

eventually earned three degrees from the University of Arizona. To supplement his income during these lean days he began painting and peddling Arizona-Sonora scenes. Soon neighboring Mexico's creative art centers attracted him. Diego Rivera saw some of DeGrazia's paintings and invited the young man from Tucson to work with him. Later DeGrazia met Jose Clemente Orozco who also expressed interest in the novice artist's fresh style. In short order, DeGrazia was working with both of these great Mexican artists, and they gave their pupil glowing letters of commendation (wrote Rivera: "DeGrazia . . . has a brilliant artistic gift . . .," added Orozco: "DeGrazia's painting has all the freshness, simplicity and power of youth . . . he will be one of the best American painters some day . . .").

Toward the end of his Mexican sojourn, DeGrazia had a one-man show at the Palace of Fine Arts in Mexico City. Then came his "triumphal" return to Tucson where he was refused



permission to hang the same show. "Some 'art expert' told me my stuff wasn't done according to the books," reflected Ted.

But, time and talent have won out. Today a DeGrazia painting brings as much as \$2000. His smaller canvases sell with regularity from \$400 to \$800. In addition, his cello-playing angels and open-faced Mexican lads appear on Hallmark greeting cards, and his designs have been put on Fuller fabrics for national distribution on yard good counters and women's ready-to-wear shops.

DeGrazia's art is of the Desert Southwest, especially that portion of



it crowded with saguaro cacti. He genuinely fears the "New York influence" which is spreading West at alarming speed: the blue serge suit, the organization man, the backward look to Europe for artistic inspiration and leadership in this field.

"We have something out here that you can't buy in the East for love nor money," says DeGrazia. "It's a spirit of freedom, and room enough to be free in. I try to get that mood into my paintings."

Late that afternoon we drove to DeGrazia's most amazing piece of art—the adobe mission that he built by hand and decorated with murals in the foothills of the rugged Santa Catalina Mountains north of town. The tiny adobe structure is on the same wild tangle of land that contains DeGrazia's selfmade home, guest house, bath house and sanctuary-gallery. The latter building is "built in perfect perspective"—35 feet long, 12 feet across the front, and six feet wide at the rear wall on which is displayed but one painting at a time.

The artist welcomes visitors to his mission, but warns that it is not a "tourist, hot-dog type of thing."

The Mission in the Sun is low and

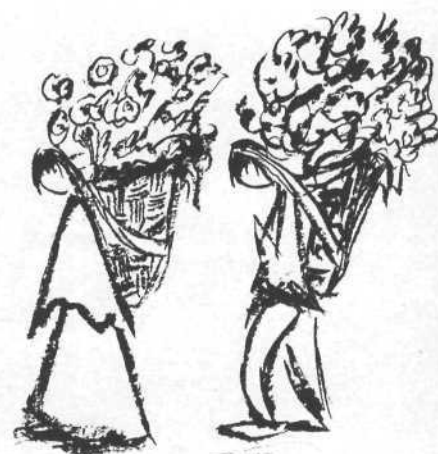


ARTIST APPLIES PRE-GLAZE SOLUTION TO CERAMIC BOWL MOLDED FROM TIP OF CACTUS ARM

rustic. It is roofless—or, more properly, covered with the most beautiful roof on earth: the deep blue Arizona sky by day, the starry desert sky by night. Standing in the entrance looking toward the altar, the eye is immediately pulled upward by the open sky to rest on a rough cross rising from a simple steeple made of saguaro ribs.

The altar is dominated by a subtle painting of Our Lady of Guadalupe, in whose honor the mission was dedicated. And bearing her gifts of flowers down both of the long side-walls are a parade of DeGrazia-painted Mexicans, roadrunners and clowns. It is colorful and massive—the work of a modern-day Gauguin who has gathered together the beauty and warmth of his border desert, as did the French artist in the South Seas.

The color and the setting were almost overpowering. I had stepped inside a DeGrazia painting. ///



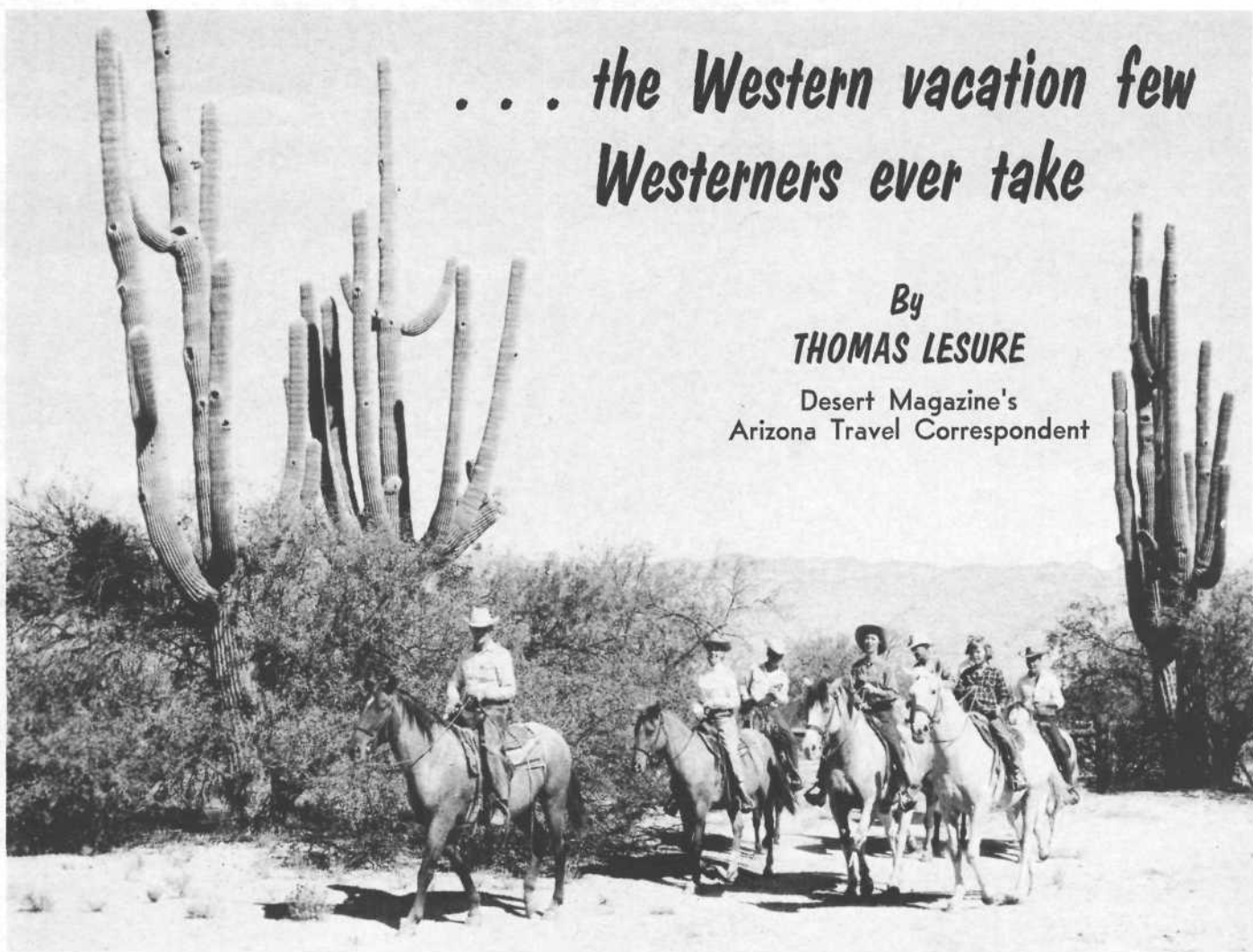
DUDE RANCHING . . .

*. . . the Western vacation few
Westerners ever take*

By

THOMAS LESURE

Desert Magazine's
Arizona Travel Correspondent



W E "DUDE" IT. After years of living in desert country and hearing about the region's dude ranches, we finally took such a sojourn a few months ago. It's the type of holiday that people from other parts of the nation consider the ultimate in Western vacations, but which Southwesterners (because it's so near and readily available) usually overlook.

Let's face it. The outlanders are right. Dude ranching is all it's cracked up to be—and then some, even for Western city folk who think they ride tall in the saddle.

There are numerous dude ranches all over the Southwest—in New Mexico, Arizona, Nevada, Utah and Southern California. As in other sections of the West, these tourist goals fall into three main groups: working ranches with regular cattle herds; resorts where cowhide saddle are the closest you will get to cattle; and the

combination ranch that's less resorty, but also works a small batch of cattle. The latter type comprises the majority, while most of the rest are resorts. A real working ranch where a limited number of guests may even take part in regular cowboy activities is fast disappearing, though by no means extinct.

One of the largest concentration of guest ranches lies around Arizona's second largest city, Tucson, where the Spanish flavor and Old West spirit is more alive than in Phoenix, the cosmopolitan capital to the north. And since Old Pueblo was both conveniently near and our time was limited, we decided to make it the locale for our dude ranch test, choosing the 640-acre 49ers Ranch near the foot of the Tanque Verde Mountains on the Tucson east side.

"Gee, it looks just like on television!" exclaimed Linda, our oldest daughter, as we drove up to the ranch

house, thereby paying the scene the highest compliment. Here, indeed—among the tall saguaros, mesquite thickets and paloverde-lined arroyos—was the look of the Old West. Grouped around a velvety green quadrangle shaded by numerous spidery-limbed mesquite trees were hitching rails, boardwalks and such porch-fronted buildings as the Sheriff's Office, Jail, Well's Fargo & Company, the Post Office, Barber Shop, Blacksmith's Shop, Dressmaker's and other frontier-type structures.

Actually, the picturesque facades marked the entrances to modern comfortable units for some 80 guests. Each room was tastefully furnished with a nice blending of present day furniture and decorations in keeping with the motif of the "establishment." The "Barber Shop," for example, had an upholstered barber's chair plus such decorative paraphernalia as shaving mugs and hair tonic bottles. The

"Dressmaker's Shop" featured a table sewing machine and an old-fashioned manikin now serving as a lamp. The "Post Office" not only had letter boxes but also a psuedo stamp window that looked like the real thing.

It was all a gimmick, to be sure, but it appeared natural rather than artificial. As far as the youngsters were concerned, this was "it"—the romantic, storybook West of the movies, television and fiction.

Before the children had a chance to feel their oats, one of the ranch's social hostesses had them corralled and headed for a quick tour of the ranch and playground. We didn't see them again until after dinner—and thereby were quietly introduced to one of the joys of dude ranching: Mom and Dad can get away from the kids for a while—and the youngsters get the same break from parents. Over the next four days of our stay, there was a pleasant combination of aloneness and togetherness for the whole family.

Most Southwestern dude ranches, since they began as regular cattle spreads, have colorful backgrounds. The 49ers is no exception—as we soon learned from affable manager Paul Barclay and his lovely wife, Liane. Later, Harold McCarthy—who, with former major league baseball star Hank Leiber, owns the ranch—expanded on some of the more lusty chapters of the ranch's history.

On part of the old Tanque Verde Ranch, the 49ers site has seen plenty of Apache and other Indian activity. According to McCarthy, quite a bit of pottery, metates and flints have been picked up on the ranch. Pancho Villa, Mexico's so-called Robin Hood bandit, also knew the area well, having used an old farmhouse down the road as a headquarters. On one occasion, McCarthy related, Pancho was almost caught. Some of his men, less fortunate at escaping, were strung-up by incensed localites.

Later on—in the '20s—an Englishman by the name of Colonel Evans started an exclusive school for boys on this site. Running it on strictly Spartan principles, he nonetheless attracted an impressive list of Eastern bluebloods who thrived on the rather rugged daily routine—so much so that the school developed one of the nation's outstanding polo teams.

During the '50s, the place was turned into a dude ranch which McCarthy first managed, then bought. Now a far cry from even a remote resemblance to anything Spartan, it draws guests from all over North America.

There are 75 guest ranches in the Tucson area (few ranch owners refer to their places as *dude* ranches). This takes in a big territory, extending about 60 miles south of the city.

Prices start from about \$75 a week per person, which include meals and such extras as horseback riding, special chuckwagon dinners on the desert, hayrides and sightseeing trips. For a complete listing of guest accommodations in southern Arizona, write to the Sunshine Climate Club, 240 West Drachman, Tucson.

The ranches start filling-up Christmas and New Years, but there follows a couple-three weeks of slack until the main season begins around the end



HELP YOURSELF, FAMILY-STYLE, IS THE NORMAL FARE AT DESERT DUDE RANCH COOK-OUTS

of January. Then they are full-up through March.

The visitor can usually get special "off-season" rates from Mid-October through November, and from April through May 15 when most of the ranches close. Some of the dude paradises stay open right through the summer, as is the case with the 49ers.

Where do the guests come from? Each ranch probably has a different

answer, but it is safe to say that the following cities and states account for the bulk of visitors: Detroit, Milwaukee, New York, Chicago and suburbs such as Evanston; Minnesota, Ohio, Pennsylvania, California, Washington and Oregon. Many Canadians also make the southern migration to escape harsh winter weather. Average length of stay at a dude ranch is two to three weeks, according to Bob Riddell of the Sunshine Club.

An important point to keep in mind: not all dude ranches will take children; others, like the Desert Willow and 49ers, bend over backwards to give the youngsters a good time.

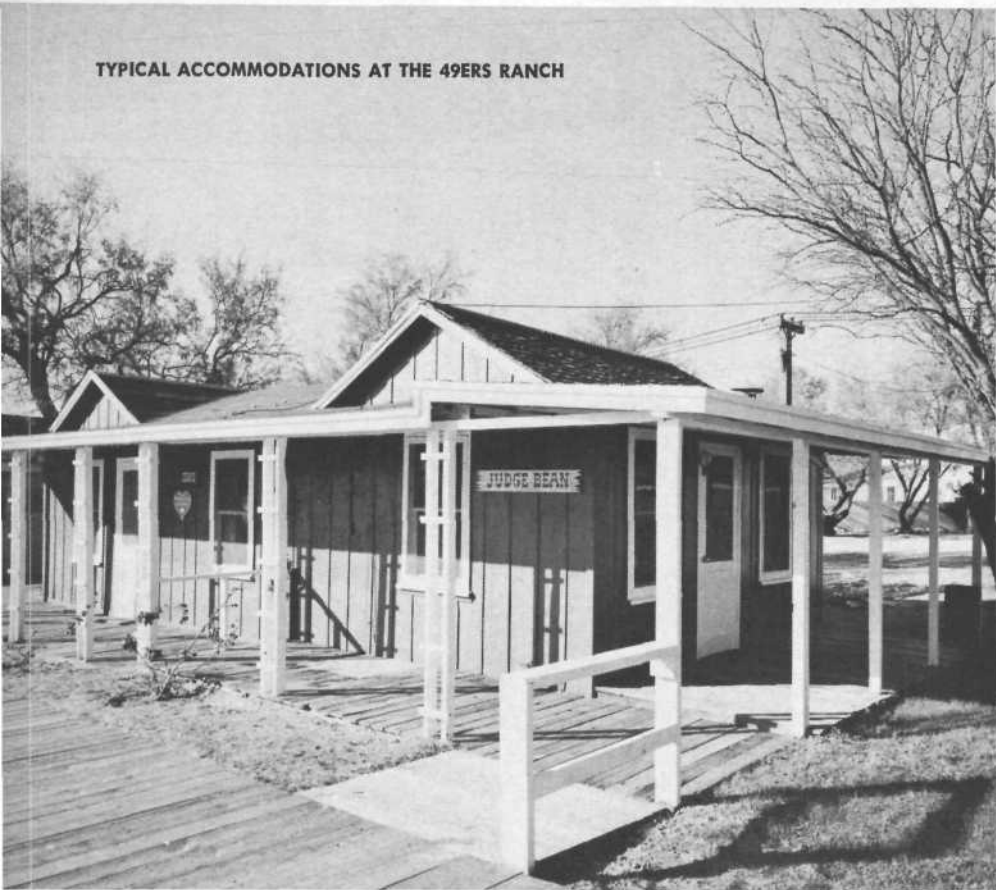
Within a few hours after our arrival, we were pleasantly acquainted with another typical ranch fare—food. This, of course, is a central ingredient in any vacation. At a ranch, mealtime—thanks to king-sized appetites worked up by outdoor diversions—is even more important. As at other ranches I've visited, the food was good and plentiful. The only drawback was lack of selection; everyone had the same kind of meal—like one large family. We were told, though, that anyone with special dietary requirements always is "fixed-up" properly.

At the end of the first meal, Dee Williams—the quiet, leathery-faced wrangler who looked a good 15 years younger than his 65 years—came up to ask if we wanted to ride the next day. This night we declined to indulge in the most popular sport on ranches since we desired a more leisurely day. Dee got us the next night, though, with friendly insistence that it was time we climbed aboard a horse!

That evening—with a baby sitter conveniently provided by the ranch staff—we sashayed over to "My Lady's Garter." This structure, with its risqué name, actually is the playroom for adults. The main fun centers around square dancing, guitar playing, cowboy singing and hi-jinks. Dee was calling the dances, generally instructing neophytes and even participating in the promenades and do-si-does despite a day in the saddle. In fact, I had a strong feeling that Dee was the liveliest character present. I couldn't keep pace after the second dance, yet he was still going strong after the fourth!

With the children off riding the next morning and afternoon, Nan and I had a chance to get in some of that relaxation for which dude ranches are noted. And its form—hardly loafing—came naturally. There was a dip in the pool, followed by a bit of sun-lazing, then some shuffleboard and horseshoes. We could have been more

TYPICAL ACCOMMODATIONS AT THE 49ERS RANCH



active with a round of tennis, golf or badminton, but a hearty luncheon by the pool sent us off into an afternoon siesta. Then another dip in the pool and we were ready to stand up against Pancho himself.

If desired, we could have gone into Tucson in the ranch station wagon or taken (with a picnic lunch) sightseeing trips to targets like Mission San Xavier del Bac, the Arizona Sonora Desert Museum, Colossal Cave, Sabino Canyon, Mt. Lemmon or even Nogales in Old Mexico. An out-of-state tourist would—and should—grab at such excursions which cost only the price of admissions; since they were all familiar sights, we decided just to stay put and soak up the *manana* mood. And so we absorbed more of that wonderfully relaxed feeling one can enjoy duding it.

There was a change of pace the next noon. A fresh-air cook-out was slated in the desert. Dee had corraled me for a ride—at last!—but he was one horse shy. So since another guest wanted only to go by horse one way, it became a split-shift affair. I rode over in the ranch station wagon and

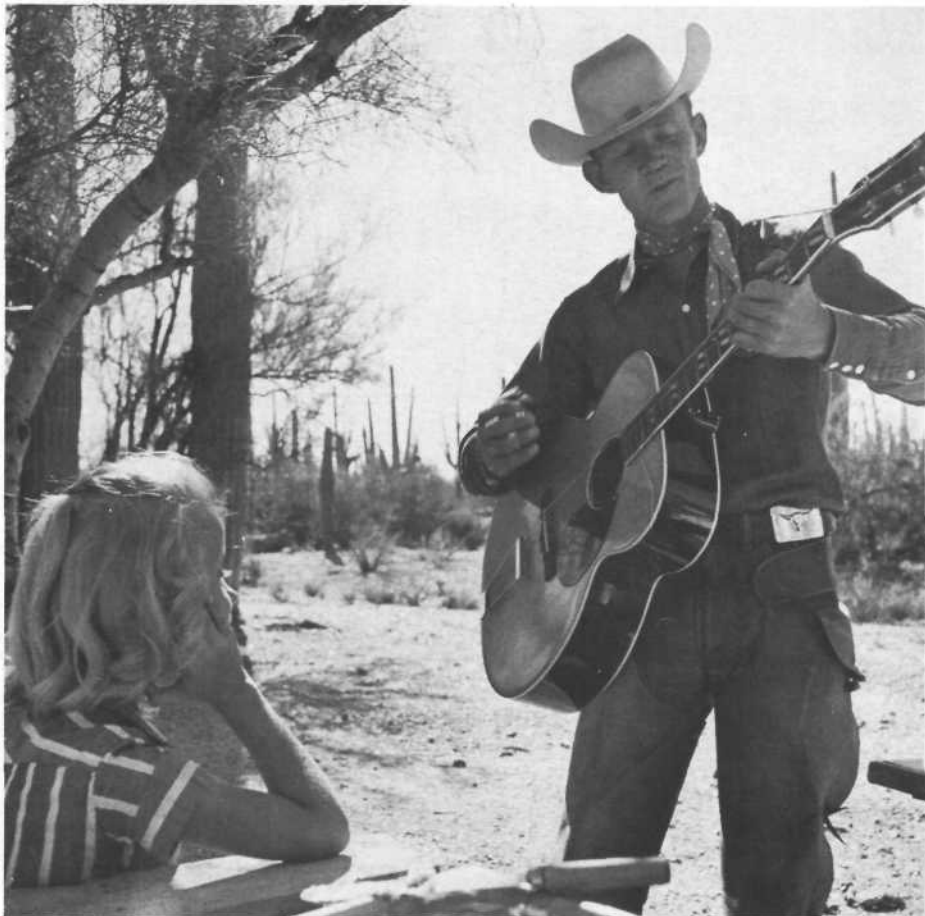
came back in the saddle. I like to think that the leisurely ride back—after a filling meal spiced with cow-

boy songs and fine companionship—was the best half. Surely, as we trotted along the dry arroyos, past scooting roadrunners, high-tailing quail and a few docile Herefords staring bug-eyed through mesquite tangles, we became—without abruptness—a part of the traditional West rather than its modern counterpart. It was exhilarating.

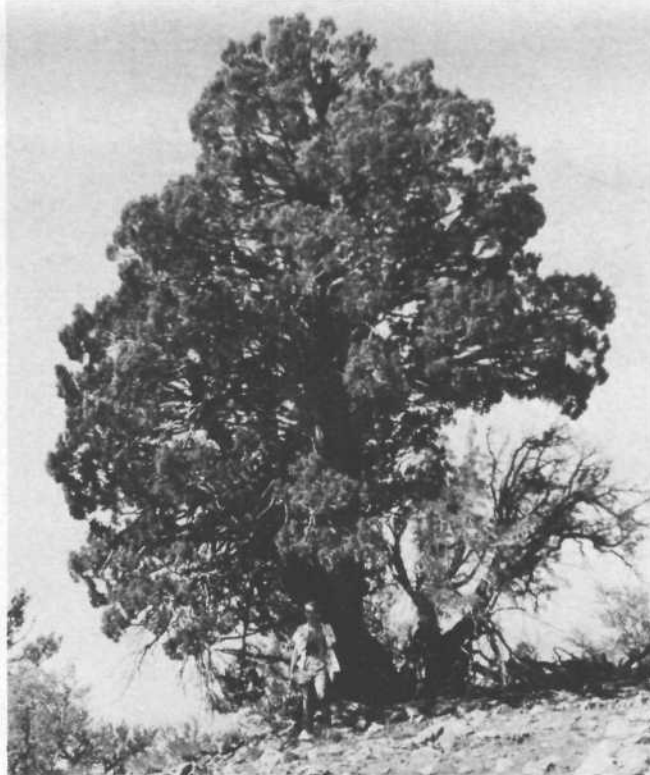
The next day brought another treat with the local cowhands competing in the regular Sunday ranch rodeo. Now some folks might call the affair a gymkana; we couldn't. What with bulldogging, bronc busting, steer wrestling, calf roping, wild cowmilking and other bone-shattering events, it was a *real* rodeo.

Too soon, much too soon, our sojourn at the 49ers was over. If anything, I'd underestimated the time and should have planned on at least twice the family fun period. But even so, we'd learned one thing: dude ranching *is* fun, even for desert dwellers. In fact, just the other day, our oldest boy, Wynn—with a vocal chorus of four supporting brothers and sister—sang out, "Say, when are we going back to that ranch again?"

Meanwhile, back at our ranch, Dad and Mom are figuring when we can return. ///



"SING ME A SONG AND LET ME DREAM"—WHICH IS JUST WHAT SEVEN-YEAR-OLD BONNIE LESURE IS DOING AFTER AN AFTERNOON IN THE SADDLE



A STURDY MOUNTAIN JUNIPER

Juníper

SYMBOL OF A DESERT CHRISTMAS

By EDMUND C. JAEGER, D.Sc.

author of "DESERT WILDFLOWERS," "THE CALIFORNIA DESERTS,"
"OUR DESERT NEIGHBORS," "THE NORTH AMERICAN DESERTS"

AS CHRISTMAS draws near we begin to think of decorations for our mantels, our windows, door lintels and the festive table. May I suggest that desert dwellers near the mountain foothills think this year of using the berry-laden aromatic lively-green and cheery sprigs of the juniper. This shrub grows widely over our deserts from eastern Oregon to Colorado, Texas, Arizona and California at elevations of 3000 to 4500 feet. Sometimes it consorts with the higher growing ocotillos, but more often with sagebrush (*Artemisia*) or desert nut pines, commonly called pinyons.

Why not make a special outing trip some early December weekend and make a festive occasion as the ancients did of "bringing home the juniper", some to be used to burn as incense, other pieces to serve as effective decorations?

Along with the juniper sprays, you can bring in some very handsome mistletoes, several kinds of which are

wholly confined to junipers. I am thinking now as particularly desirable the mistletoe known to botanists as *Phoradendron densum*, so named because its leafy short branches occur in dense tufts. Sometimes, if the quail haven't beaten you to it, you can find it ornamented with numerous small almost transparent pearl-white berries.

The generic name of the junipers, *Juniperus*, is an ancient Latin term adopted by the famous Swedish botanist, Linnaeus. It is probably derived from *juni*, a corrupt contraction of Latin *juvenis* meaning "fresh, young" and *parere*, "to produce." The French used the word *genievre*, and since they used the berrylike fruits to flavor their gin, it is easy to see where that drink got its name.

Junipers, of which there are some 30 kinds with some 70 subspecies, are found over much of the Northern Hemisphere from near the Arctic to India and the Mediterranean in Eurasia, and south to Mexico in the

Western Hemisphere. Many are low bushes, shrubs or semi-trees; but some, like our western juniper of the high mountains of the far Western United States, are noble trees of considerable girth and height. Of all the junipers, the most widely distributed is *Juniperus communis*, found in northern and middle parts of North America, Europe and Asia. In the arid western United States, California juniper (*Juniperus californica*), Utah juniper (*Juniperus utahensis*), Rocky Mountain juniper (*Juniperus scopulorum*), and One-seeded or Cherry-stone juniper (*Juniperus monosperma*), are the most widespread. All are erect shrubs or small trees.

Very erroneously the name "cedar" is widely applied in America to all kinds of junipers. Cedars are really quite different trees, and are wholly Old World in distribution. Of true cedars there are but three kinds: the Cedar of Lebanon, the Deodora from the Himalaya Mountains of

India, and the Mt. Atlas Cedar of North Africa. Most "cedar chests" sold in furniture stores are made from the Eastern Juniper (*Juniperus virginiana*). This is also a great source of "pencil cedar". Several other evergreen juniperlike trees are called cedars, among them trees of the genus *Thuya* and *Chamaecyparis*.

In very early spring the junipers are in flower; the tiny almost inconspicuous male and female reproductive organs (pollen or spore cones) being found on separate trees. The male trees shed enormous amounts of yellow pollen, and if we at this time shake a branch, soon the air is literally filled with clouds of powdery pollen grains. With most junipers it takes two years for the berries to grow to maturity. When ripe they are very ornamental with their surface bloom of silver-blue wax. They look very "Christmasy." The juniper berries are not true berries, but simple cones whose several fleshy scales adhere or actually fuse to one another. They never open up to discharge their seeds which vary in number from one in the One-seeded Juniper, to several in other species. The wise wild mice know that these seeds are rich in nourishment, and sometimes we find where they have stored them in quantity under rocks. In order to get at the rich inner kernels, the mice cleverly gnaw through the hard woody seed coat in several places, leaving behind curious little sculptured beads with eye-like openings. These may be strung as beads for a necklace which is at once attractive and quite unique.

Juniper seeds are slow to germinate. The seedling plants have quite different leaves than the mature trees. Instead of being scale-like, deep-green and pressed close together, they are spreading, sharp-pointed and silver-green. These young leaves comprise what botanists call juvenile foliage.

Junipers, especially the shrubby kinds, are favorite roosting places for Gambel's quail, and nesting sites for a number of birds, among them the roadrunner who finds among the numerous inner stringy-barked branches a perfect setting for her platform nest of small gray sticks. Because of the bird's checkered coat of black, white and brown feathers, it is almost impossible to detect it when on the nest. The same may be said of the young birds. When approached, the incubating bird slips quietly backward out of the nest and adroitly drops to the ground. As I now recall, the first roadrunner nest I saw was in a spreading juniper near Palm Springs. The same nest was used for three successive years and might have been

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used longer had not some hunter shot one of the parent birds as it fled from the tree.

Several snakes, among them the desert striped racer, are good tree climbers, and on a number of occasions I have seen them climbing high into junipers seeking bird eggs or young birds.

From the 1880s to 1915 vast numbers of shrubby junipers (*Juniperus californica*, *J. scopulorum* and *J. utahensis*), growing on the north slopes of the San Gabriel and San Bernardino Mountains in California, and the uplands along the Santa Fe Railroad right-of-way in Arizona, were cut down and shipped into Los Angeles, Pasadena and nearby coastal cities to serve as fuel in fireplaces and stoves. Thousands of acres thus became barren wastes littered with stumps, wood chips and a dreary unsightly cover of dead branches. But the pack rats (*Neotoma*) found here just what they wanted—plenty of small sticks and wood chips to construct their shelters. The evidence of their building activities was seen on every hand. The largest rubbish-heap "nest" I have ever seen was in such an area. It must have been eight-feet across and at least four-feet high—representing the diligent work of many generations of neotomas, each of the occupants adding their bit of materials.

When wood rats are plentiful they often choose, for reasons I cannot tell, certain bushes from which they cut so many of the green branches that only a very few are left. Such trees, stripped of their food-making leaves, take on a very peculiar sick and "ratty" appearance, especially noticeable when found among other large healthy junipers.

My entomologist friend, Noel McFarland, tells me of a clever little geometrid moth (*Semiothesa excurvata*) which has a larva which looks so much like a green juniper shoot that it is almost impossible to detect it. The larva rests by clasping a juniper twig with its prolegs and extending its body almost straight out into space. Its skin is even marked to look like the scaly-leaved young twig.

Then there is a lovely small butterfly (*Mitoura siva juniperaria*), one of the lycaenids with striped markings under the wings, hence sometimes called a "hair-streak". It flies about the junipers and "is almost as much a part of the juniper as the handsome juniper berries": its whole life history from egg to adult is bound-up with this shrub. It should be looked for especially in spring. When

at rest or feeding this little butterfly has the curious habit of rubbing its wings together with an even, gentle motion; just why it does so, no one knows.

While in the larval state several very beautiful metallic bupestrid beetles, some of them quite large with prettily sculptured bodies, mine both dead and living juniper stems. One of the emerald juniper borers has a body of bright iridescent green with golden reflections.

William B. Davis, in his recently published *Mammals of Texas*, says that in winter "cedar" (juniper), when available in large quantities is used as forage by the pronghorn antelope. This is one of the few larger mammals that regularly feeds on this pungently aromatic woody plant. Sheep and cattle will sometimes eat it when other foods are scarce. Coyotes, when hard-pressed by hunger, eat many of the berries. These valuable canines, along with certain birds, are probably responsible for the wide dissemination of this large shrub so well adapted to the open and often otherwise barren slopes of arid lands. There are several junipers whose berries have a rather sweet taste and so they often comprised a part of the Indian bill-of-fare.

The worst of the junipers' enemies are fire and man. Wherever I walk through old stands of these hardy shrubs I find charred stumps which record old fires, some of them centuries old. The charred wood is very resistant to decay. Old chunks of charred junipers have been found buried hundreds of feet deep in detrital fills when deep wells have been bored—mute testimony that these evergreen shrubs have been arid-land inhabitants for many millennia. Careless man-made fires sweep through juniper thickets with unusual fury, destroying not only the shrubby vegetation but many beneficial insects, microscopic plants and animals.

Because of the long-lasting nature of their heartwood, junipers suffer considerably at the hands of fence post makers; in fact juniper posts are the most sought-after of any kind. The Utah juniper (*Juniperus utahensis*) perhaps yields the straightest poles.

Indians, well knowing the toughness and springiness of the wood, made their bows from it, and often the long chisel sticks they used to pry the edible centers out of agaves. Since agave-heart roasting is now largely a lost practice, agave sticks are seldom seen any more, and those persons who possess them rate them as high-value museum pieces. I valued so highly a very fine one I found in the wild

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mountains of eastern San Diego County that I carried it, heavy as it was, on my shoulder for more than 60 miles!

The junipers of most appealing appearance to me are the Alligator Juniper (*Juniperus deppeana*) of Arizona, New Mexico and western Texas, and the high-mountain Western Juniper (*Juniperus occidentalis*). The former is called Alligator Juniper because of its peculiar brittle gray checkered bark. Its wood is exceedingly fine-grained and aromatic. Trees 500 to 600 years old are often of immense girth (15 to 18 feet) but seldom more than 30-feet high. It always fills me with a sense of great sadness when I see one of these fine old veterans sawed down or felled with the axe. Any tree that has endured so successfully the vagaries of wet and dry years should be respected and saved.

The Western Juniper is confined wholly to the higher parts of mountains of the Pacific Coast; they are seldom found below 7000 feet. Often buffeted by storm winds of high velocity, they grow upward very slowly, seldom reaching a height of over 50 feet. But the girth may be great, even up to 21 feet. Some of the Junipers, along with the redwoods and bristlecone pines, must be among earth's oldest living plants. The sturdy gnarled side limbs, even those high in the crown, are often several feet through. The bark, often stringy, is of a rich cinnamon color. The abundance of blue-black small berries add much to the trees' appeal. Individuals growing in open sagebrush flats often take on a very symmetrical form, altering their appearance only when very old. ///

QUIZ ANSWERS

Questions are on page 13

- Giant cactus forest: Q—Saguaro
- Walled villages, watchtower: F—Casa Grande
- Cavern system: L—Lehman Caves
- Spectacular dunes: T—White Sands
- Three sandstone bridges: M—Natural Bridges
- Huge arches, windows: A—Arches
- Largest arch: P—Rainbow Bridge
- Beautiful canyons, cliff dwellings: B—Bandelier
- Unusual desert plants: N—Organ Pipe Cactus
- Spanish mission: S—Tumacacori
- Red canyons, evidences of Indians: C—Canyon De Chelly
- Spanish mission ruins: K—Gran Quivira
- Colorful rock faces: G—Cedar Breaks
- Small underground chambers: R—Timpanog Cave
- Mormon fort: O—Pipe Springs
- Cinder cone: E—Capulin Mountain
- Key fort: J—Fort Union
- Inscription rock: I—El Morro
- Intricately carved rocks: D—Capitol Reef
- Grotesque rocks: H—Chiricahua

Trouble on the Colorado

By LUCILE WEIGHT

Desert Magazine's California Travel Correspondent

The government,
moving late,
is attempting to
unsnaarl the
"squatter" problem
along
"Recreation River's"
not-so-tranquil
shores . . .

DEVELOPMENT OF recreation along the Colorado River is a problem which has become acute largely because the need for such development has grown much faster than the Federal Government has moved to settle it.

With ocean beaches and harbors and the mountains already overcrowded by California's exploding population, the inevitable movement to the desert and to the hundreds of miles along the Colorado River started many years ago. But the tempo has quickened unbelievably the past 10 years. As a result, river resorts, boat docks, riverfront homes and agriculture have grown like Topsy. The greatest concentration is along the river south of Parker Dam.

Most of the river land was withdrawn from entry by the Bureau of Reclamation when the dam projects started, so use of the land after that was unauthorized. Some of those who "moved in" possibly did so in the belief that if they waited for the government to get the rules in order, they would not live long enough to have a chance at the river. In the meantime, many of these private individuals provided needed services and accommodations for the thousands of week-enders who crowd highways with their campbacks, trailers and boats—in an ever larger stream from metropolitan Southern California.

Some of the trespassers, too, may have had in mind Federal restrictions on other lands which have been closed to them. Vast sections of land, taken over for military purposes and subsequently abandoned, still are withheld from citizen taxpayers. Much of this "frozen" land is ideal for exploring, camping, rockhunting—though it has no water.

Now, the river is a thrilling playground for younger people who race boats and water ski, and for older folks who enjoy boating and fishing—or the companionship of other river campers. Mountain climbing and rockhunting are immediately adjacent to the river campspots. It is a natural recreation focus for the thousands who cannot find even a wedge left on the beaches or in the mountains. And it is virtually a year-round playground.

* * *

Why didn't the government develop a master plan for use of the river long ago?



END OF ANOTHER PERFECT DAY ON THE LOWER COLORADO—BUT WHAT WILL TOMORROW BRING?

It must have been conscious of this problem, which arose the moment the lands were officially withdrawn. Should hundreds of thousands of people have stayed away from the river, while the government tarried 20, 30, 40 years to appoint commissions, conduct hearings, and finally after millions of dollars have been invested—even though illegally—to decide to file suits against a few of the trespassers, as court tests? Now that the river is controlled by dams, why does the Bureau of Reclamation hold on to the lands it withdrew?

There have been many reasons for the government's apparent lack of action. There are knotty problems of jurisdiction, plus continuing work in power and reclamation development along the river.

Here are some of the problems the government has faced: The boundary between California and Arizona—the river itself—won't stay put. It has been a matter of sporadic dispute as the course continued to shift. This brought controversies over which state and which county was to collect taxes, fishing and hunting licenses. A commission thought it had this question settled a few years ago, but boundary disputes broke out afresh.

Also, even with the dams built, all danger of flooding is not past, says the Department of Interior. Violent storms could pour such a volume of water down the Bill Williams River tributary, for instance, that floods of water might have to be released from behind Parker Dam. There also is need for further channel cuts and other river control projects.

Another problem is that of desilting. While silt-fill has not accumulated as fast

as had been estimated in the years before the dams, it still looms as a chore, and provision must be made for it.

Furthermore, large scale development along the river would require water. But use of Colorado River water is controlled by U. S. pacts with states, with Mexico and such agencies as the Metropolitan Water District. In the background of all the specific problems surrounding that of trespass is this larger question of division of the water, especially as plans for further development in the Upper Colorado are made. In addition is the continuing water dispute between Arizona and California. A representative of the Department of the Interior has stated, however, that the amount of water needed for Lower Colorado recreation would be negligible. Nevertheless, its use undoubtedly would require a multiplicity of approvals.

Another roadblock to Federal action appears to be the sportsmen's interests. Less than a year after the California Division of Beaches and Parks gave top priority to a 9200-acre site in the Parker Dam area as a State Park, and gave tentative approval to other river sites, the Fish and Game Department filed an appeal to the Colorado River Basin Field Committee, an organization within the Bureau of Reclamation. The Fish and Game wanted the right to file on any hunting lands that the government might relinquish. Sportsmen see their dove and quail shooting taken from them, and the deer in the area protected from them, as State Park rules prohibit shooting. Obviously a State Park in which families may be camped and in which Scouts and other youth groups may be hiking cannot be left free for hunters, who have an unenviable casualty record.

The unresolved problem perpetuates an uncertain and unpleasant situation not only for individuals and the Federal government; the adjacent counties have to cope with several problems. Taxwise, the counties are in an untenable position. The property, being Federal, is untaxable. Yet services such as that of the sheriff's department are necessary, and are paid by the county taxpayers. (The county can tax the "unsecured" property). This tax loss, when the county must contribute services, is of some consequence when one considers that land of the county of San Bernardino, according to one of its officials, is 76 percent under Federal control.

Regarding this property tax matter, we wonder what legal recourse some of the "resort" operators would have if a vacationer decided to set up camp without paying posted fees. Can one trespasser legally order another off the premises?

Other county problems are those of sanitation and building. A San Bernardino county official, in July 1960, spoke of a possible epidemic as a result of uncontrolled sanitation facilities. He cited a count of 65,000 visitors over a single weekend last Memorial Day in the Parker Dam area alone. Parker Dam County Recreation District, formed about 1958, should have given the county some control over building and sanitation within the district boundaries. But now the Federal government has requested the county to stop issuing building permits. This order is understandable, for such a permit would give quasi-sanction to squatters.

The Federal government, while juggling with one hand the issues of water division, state boundaries and river channelization, with the other has made a tentative proposal to create a "Lower Colorado River Interstate Recreation Area." This area, similar to that of Lake Mead National Recreation Area, would extend from Davis Dam to the Mexican border, exclusive of federal wildlife refuges and Indian reservations. It would be administered by the National Park Service for possibly 10 years, during which period the government would attempt to bring about cooperation of all parties concerned in order to develop the area to the fullest extent for recreation.

This sounds reasonable and hopeful. But as it involves many humans, there are complications. For example, in this tentative outline the government indicated that when the master plan is drawn, leases may be given to individuals. . . Leases to which individuals? To those who moved in and set up business after withdrawal of the land from entry? Or would those who stood back, in the face of Federal restriction, have an opportunity to obtain a lease? If the lease plan is followed, would it be fairer to the less aggressive for the government to conduct a drawing of space or concession? Or would only those with big capital, on a bid basis, have a chance?

As to those farmers who moved in and cultivated the land and harvested rich crops from them, should they be given lease priority? With Federal subsidies on agricultural crops, should men violate prohibition on land use in order to put in more crops? These farmers point out that they have made barren land productive, that they have added to the economy and pay taxes which would have been lost if they had heeded the ban. Some of them have formed organizations to seek leases and to fight eviction suits.

And what of those individuals who have

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called the river home for most of their lives—from the days before the Bureau of Reclamation withdrew the land but did nothing about moving the inhabitants or making other arrangements with them?

Despite the morass of river problems, criticism is due the government, which has a larger responsibility than do individuals. The Department of Interior has been aware of the gradual encroachment. Even though it was occupied with seemingly larger

aspects of the problem, the one of trespass has increased faster than the others and is now in such an advanced stage that far more money is involved and many more people are going to be hurt no matter what the solution.

At least one county, San Bernardino, attempted to get some immediate solution to the most acute situation in the Parker Dam area. It asked for a lease so that county laws could be invoked, but with eviction cases pending the Bureau of Reclamation would not grant this. The county, after failing to get cooperation from the National Park Service in learning of future land use plans, and being told to keep hands off in the matter of building regulations, then asked that the government: Prepare a "workable" program; keep the county informed of the government's latest land use plans; provide some means by which an interim program can be put into effect to protect public health, safety and welfare. Incident to this last, from the number of casualties in the river, it would seem that life saving and police protection are much needed. The county apparently is the only agency available to provide this. Yet can the county do it legally, and if so, should the taxpayers foot the bill for services rendered on Federal land?

Two encouraging actions are current. Bills to set up a commission to study multipurpose use of lands along the river have been introduced in Congress by Senator Barry Goldwater and Representative Stewart Udall, both of Arizona.

And the river cities have joined hands to make a united effort not only to encourage creation of an over-all plan, but to let the world know the recreation value of the Lower Colorado. The "Colorado River Area Development Association" with representatives from Yuma, El Centro, Brawley, Blythe, Parker, Needles, Kingman, Bullhead City and Searchlight, have had several preliminary meetings. Members have elected Bill Claypool III of Needles chairman for 1960-61, and Dan Halpin, Yuma Chamber manager, as secretary-treasurer. Whether from Nevada, California or Arizona—they all realize that their river has an unlimited potential. And they know that by uniting, and cooperating with all agencies involved, they can see that river become the Waikiki of the desert.

California's December Calendar:

5-11—Fourth Annual U.S. Senior Golf Championships, to be played on three courses in Palm Desert area.

10—Fourth Annual Lancaster Christmas Parade (all floats confined to religious aspect of Christmas).

19—Barstow Christmas Parade

Arizona's December Calendar:

2-4—Fiesta of the Two Saint Francis, Tucson.

4—Fourth Annual Yuma Kennel Club Dog Show at the Fairgrounds.

9-11—Dons Club bus tour to Death Valley, from Phoenix.

10—Christmas Boat Parade, Bullhead City.

10—Christmas Parade, Cottonwood.

11—Miracle of the Roses Celebration, Scottsdale.

11 and 28—Desert Sun Ranchers' Rodeos at Wickenburg.

31—Copper Bowl Football Game at A.S.U. Stadium, Tempe.

POEM OF THE MONTH

Sanctuary

And on the nth day
God created the desert with its
finger-painted sky;
And all the somber shades of time
He gathered there
In the sagebrush and the cactus
And the mottled colors of the sand
and rock;

And He gathered there all living
things that love the sun,
And over them He blanketed the
deep, sweet cool of night,
And formed the low-hanging vapors
of the dawn.

And He breathed a wind that
could play a swell of music
On the harp strings of the naked
trees,
Or leave the fragrant air to rest
as silent as a stone.

And all around His handiwork
He dropped a curtain
Of roughhewn mountains;

Walling out the tumult of the cities
And the outcry of the troubled
voices
And the beating of the ever-seeking
hearts;

Walling in the grandeur of a place
where He could go
To be alone.

—By EUNICE M. ROBINSON
Santa Ana, Calif.

Desert Magazine pays \$5 each month for the poem chosen by the judges to appear in the magazine. To enter this contest simply mail your typewritten poem (must be on a desert subject) to Poetry Contest, Desert Magazine, Palm Desert, Calif. Please include a stamped return envelope.

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This contest is restricted to those whose writing has not appeared in Desert Magazine during the past four years (since issue of Nov., 1956). All manuscripts must be typewritten on one side of the sheet only; double spaced; wide margins.

Manuscripts should be from 1200 to 1500 words in length. Photos and appropriate art work are not essential, but if available should be included with the manuscript.

Stories should be of true experiences, previously unpublished and original. Writers must be prepared to supply confirmation as to the authenticity of their stories. Tall tales and heresay stories are not solicited.

Contest ends Dec. 12, 1960. Decision of the judges will be final. Unaccepted manuscripts will be returned only if accompanied with return postage. Mail entries to: Contest, Desert Magazine, Palm Desert, Calif.

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SOUTHWEST NEWS BRIEFS

¶ The first step recently was taken toward finding a solution to the problem of unsupervised juveniles getting into trouble when they cross the border for a fling in Mexico, Tijuana and other Mexican border cities. U.S. and Baja California officials agreed in principle on control measures for curbing the entry of the young people. The talks were held preliminary to an inter-parliamentary meeting scheduled in Washington to study the problem.

¶ Work is expected to begin soon on a hard-surface road from Hanksville through Capitol Reef National Monument to the pavement at Fruita. The road will provide an important east-west link through Utah's wilderness area. William S. Krueger, supervisor of Capitol Reef, estimated that over 750,000 people a year will visit the monument at the completion of the new road. Local boosters were saying that the new link "should bring more tourists to southern Utah than any road ever built in this area since U.S. 89 was laid out." Meanwhile, construction is underway on a new alignment of the highway southwestward from St. George through a corner of Arizona and on to Mesquite, Nevada. The new road will be built in the Virgin River Gorge.

¶ The states of Arizona, California, Wyoming, Utah and Nevada are considering a proposal to exchange information on traffic violators, in an effort to reduce highway accidents in the West. A con-

victed driver's record would be distributed in all five states — and a driver could have only a single valid license at one time. Thus, a driver whose license was withdrawn in one state would be unable to get a license in the other co-operating states.

¶ More than 3000 California motorists were caught in the act of littering the highways with trash during the first nine months of 1960. The state's Highway Department estimates that the cost of picking up litter along the roadways during this period was \$1.3 million. This figure is more than twice what it was four years ago.

¶ The University of Nevada has established a Desert Research Institute to conduct educational research for industry and government into arid-land climate conditions and weather modification. Named director of the Institute was Wendell A. Mordy, an authority on cloud-seeding techniques.

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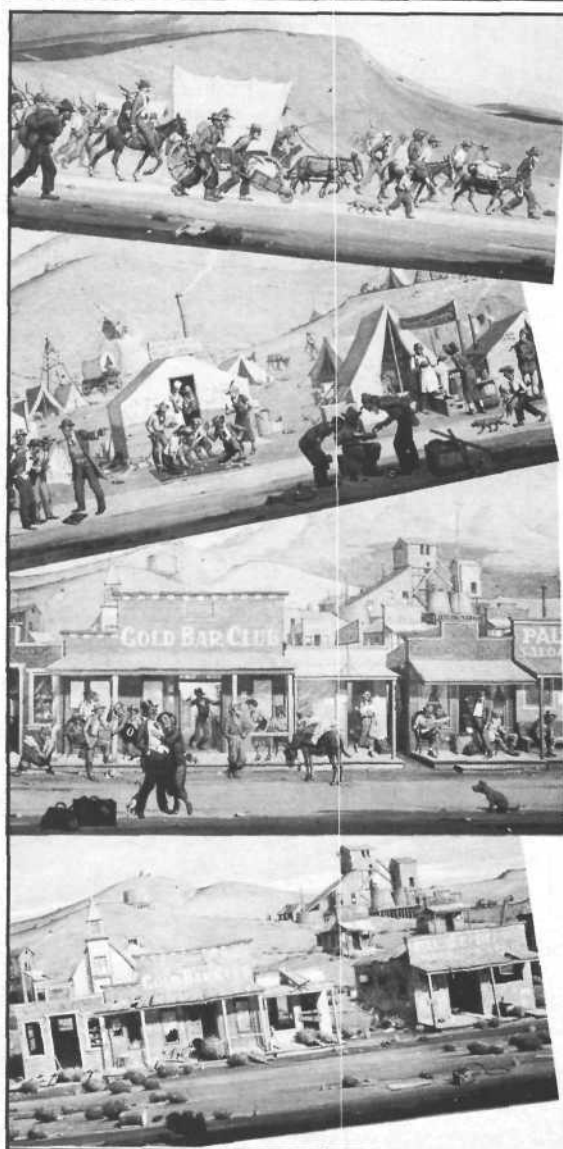
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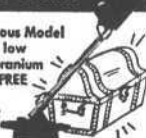
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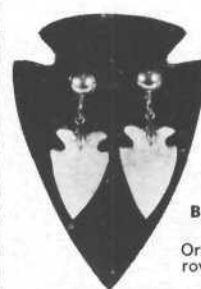
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By RANDALL HENDERSON

ONE EVENING in October I camped with a group of 70 men and boys in Tecopa Gorge in a remote sector of the Mojave Desert of California. This was the occasion of Dr. Edmund Jaeger's annual "Palaver." It is a campfire reunion of students who were in the scientist's classes during the years he taught at Riverside College. Some of the men were accompanied by their sons.

During those teaching years Dr. Jaeger spent most of his weekends camping on the desert studying the adaptive forms and habits of the creatures of this desert land. Always he was accompanied by some of his students. Today most of these companions of the school days are successful professional and business men, many of them science teachers. They continue to be grateful to their instructor for enlarging their field of interest to include the works of the Creator as revealed in the world of nature. And once a year they gather around a desert campfire for another lesson. They have been fortunate to have had such a teacher.

I can understand the confusion of youth in a period of world-wide dissension such as we are witnessing today from Little Rock and Atlanta to Moscow and from Cape Town to Peking. I had to face this situation many years ago when my teen-age son confronted me with the problem of reconciling the story of creation as narrated in the book of Genesis with the evolutionary theories of creation and biological progress.

In the discussions which followed, we solved the problem to his satisfaction and mine—but our solution was one that would be regarded as heresy by those theologians who regard the Bible story as a literal revelation from God.

We came to the conclusion that we should look to science for enlightenment as to the physical facts and processes of this earth, and to our religion for understanding and guidance as to moral and spiritual values. We discarded the concept of a God who leads victorious armies, who grants special favors to chosen people, who tortures men and women in hell for their sins, or who speaks to men out of a burning bush.

The God we visualized for ourselves is the great Lawmaker, not the policeman of the universe. It is for men to study and try to understand Natural Law—and to the extent that they succeed or fail they create their own rewards and punishments. Our faith is in the ultimate triumph of Truth and Justice and Beauty. The scientists are God's most active allies on this earth, for they are the most avid truth-seekers among us.

Thus we reconciled—for ourselves at least—any seeming conflict between science and religion.

* * *

In my scrapbook is a quotation from Jack London which helps explain why some people are fascinated by

the desert and others repelled by it. Describing one of his characters, London wrote:

"The trouble with him was that he was without imagination. He was quick and alert in the things of life, but only in the things, not in the significances."

Isn't that an interesting formula for classifying human beings?

For years I have been seeking the answers to these questions: Why is the desert a place feared and hated by some, while for others it has a gripping fascination? What type of person falls under the spell of a land the most obvious features of which are drab dunes and hills, thorny shrubs and desolate aridity?

Generalizations usually are inaccurate and often untrue—but of this conclusion I am sure: an unimaginative person never acquires much attachment to the seemingly lifeless terrain that lies between himself and the distant horizon. Those who see only the "things" find no charm in a land of bare rocks and sand undecorated by the deep coloring of luxurious verdure. Appreciation of the desert's artistry is limited to those who have the vision to see behind and beyond the superficial aspect of things—those with the power to deal with significances.

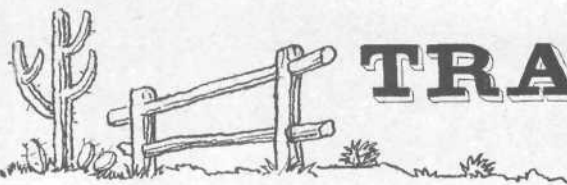
To these the desert is interesting because they recognize in this strange world of paradoxes the opportunity to gain new understanding of the miracles of creation and adaptation.

* * *

The desert from Palm Springs to Albuquerque and from El Paso to Salt Lake City has been having a great land boom. The real estate men have been having a field day as speculators have bid prices ever higher and higher. I know instances in which subdivision acreage advanced from \$15 to \$10,000 an acre in the last 14 years. A friend recently paid \$37,000 for a section of bare rock and steep mountainside which was sold a few years ago for \$1.50 an acre.

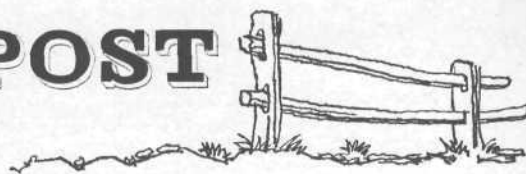
The land rush will not go on forever. During the 49 years of my residence on the California desert I have seen three cycles of boom and bust.

It appears there are two kinds of brokers in the business of selling desert real estate. Many of them are mere land hawkers who do not know the difference between catsclaw and creosote bush—and are making no effort to learn. Their only interest is in the dollars another deal will bring them. When the boom explodes they will be gone. But there is also another type of realtor. He is a student of soil and climate, and of water-tables and flood hazards. He gives his client sound advice as to zoning regulations and the proper kind of construction for desert living. These are the builders to whom present and future generations will always be grateful. And may their tribe multiply!



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OUT-OF-print books at lowest prices! You name it—we find it! Western Americana, desert and Indian books a specialty. Send us your wants. No obligation. International Bookfinders, Box 3003-D, Beverly Hills, California.

LOCATE ANY book. No obligation. We search; quote price. Specializing Western Americana. Aardvarks Desert Bookhunters, Box 734-D, La Mesa, California.

SO YOU Want to Start a Rock Shop, new book by Arthur E. and Lila Mae Victor, 52 pages, price \$2. Invaluable information for the beginning rock shop, or any "thumb-nail" sized retail business. Interesting reading for any one. By the same authors, Gem Tumbling and Baroque Jewelry Making, sixth edition, authoritative and recognized book of complete instructions. At your dealers or order direct, \$2 each, postpaid from Victor Agate Shop, South 1709 Cedar, Spokane 41, Washington. 8c tax Washington delivery.

"OVERLOOKED FORTUNES"—in the Rarer Minerals. Here are a few of the 300 or more you may be overlooking while hunting, fishing, mining, prospecting or rock hunting: Uranium, Vanadium, Columbium, Tantalum, Tungsten, Nickel, Cobalt, Titanium, Bismuth, Molybdenum, Selenium, Germanium, Mercury, Chromium, Tin, Beryllium, Gold, Silver, Platinum, Iridium, etc. Some worth \$1 to \$3 a pound, others \$25 to \$200 an ounce. Learn how to find, identify and cash in on them. New simple system. Send for free copy "Overlooked Fortunes in Minerals," it may lead to knowledge which may make you rich! Duke's Research Laboratory, Box 666, Dept-B, Truth or Consequences, New Mexico.

LOST MINES, buried or sunken treasure, bibliography. Our research has 41 books, articles, maps covering this fascinating subject. Complete list \$2. Earth Science Enterprises, Parkwood Drive, Madisonville, Kentucky.

"GEMS & Minerals Magazine," largest rock hobby monthly. Field trips, "how" articles, pictures, ads, \$3 year. Sample 25c. Box 687J, Mentone, California.

GEM HUNTERS Atlas. Three great books for the rock collector, covering the eleven western states. Each atlas has 32 full page maps with gem hunting areas spotted in color. Type of material, mileages and all highways are shown. Northwest \$1, California—Nevada \$1, Southwest \$1, postpaid. Write for our selected list of books on mineralogy, wildlife, Americana, and travel. Scenic Guides, Box 288, Susanville, California.

BOOKS: "PANNING Gold for Beginners," 50c. "Gold in Placer," \$3. Frank J. Harnagy, 7011/2 E. Edgeware, Los Angeles 26, California.

SPECIAL GRAB-BAG offer: we will mail you 20 different back copies of Desert Magazine (all issues complete and in good condition) selected at random from our 1950 thru 1957 files, for only \$3 (sorry: no exchanges). A treasury of illustrated feature articles, maps and stories on the Great American Desert. Best bargain the postman can deliver, for Desert is one of the few magazines people save. Send orders to: Grab-Bag, Desert Magazine, Palm Desert, Calif.

CONTRIBUTORS SET back issues Desert Magazine in four-drawer steel file \$115. Loyd Cooper, 3045 Claremont Heights Drive, Claremont, Cal.

FOR SALE: Desert Magazine from 1940 in binders. Several copies 1937-38-39. Arizona Highways from 1941 in binders, fine condition. Green, 8260 West 4th, Los Angeles. WE 9-0938.

HARD-TO-find books located. Millions available through world-wide contacts. Book Land, Box 74561L, Los Angeles 4, California.

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CAMPING EQUIPMENT: Personally selected scout, trail, family tents. Best quality United States manufacturers. European pack equipment. Satisfaction guaranteed. Send 25c for catalog. Don Gleason's Campers' Supply, Northampton, Massachusetts. Good practical equipment at sensible prices.

FOR SALE: complete camp outfit for two, like new. Miss Traill, 7125 Stafford Ave., Apartment 2, Huntington Park, California. See or write today for a real bargain.

FREE CATALOG—World's finest lightweight camping and mountaineering equipment. Used on Mt. Everest, Himalayas, Andes, etc. It's expensive but absolutely unsurpassed! Gerry, Dept. 107, Ward, Colorado.

MICROSCOPES, NEW and used, for professionals and hobbyists. Slides, accessories, books. Write for price list. Peninsula Scientific, 2421 El Camino, Palo Alto, California.

SLIK TUMBLERS regular size and midgets, all grits and polishing powders, Frantom units, saws, etc. We have the new M K diamond blades all at regular prices. Write us your needs. Joseph S. Gentzler, P.O. Box 1292, Santa Ana, California.

ONE GALLON cans for tumbling stones, lined with rubber, \$4 postpaid. Lake Superior agates polished, \$5 per pound, postpaid. December only. Scoop Advertising Service, Stockton, Ill.

• FOR WOMEN

LADY GODIVA "The World's Finest Beautifier." Your whole beauty treatment in one jar. Protect skin against sun, wind. For free brochure write: Lola Barnes, 963 North Oakland, Pasadena 6, California.

DRY SKIN conditions solved with daily application of G'Bye Dry. Large jar prepaid for only \$1. Try it now and be desert happy. Nevada RX Drug, Boulder City, Nevada.

SOUR DOUGH biscuit recipe and full directions \$1. Dutchoven or modern baking. Revive the lost art. Franks Murdock, Dalhart, Texas.

RETURN GREY hair to youthful color, in privacy your bedroom. Guaranteed. Details free. Mary Reid, Box 68, Hackensack City 2, New Jersey.

ENJOY DELICIOUS salt rising bread. Send \$1 for complete recipe to: A'Della Whitmore, 808 31st Street, Bakersfield, Calif.

• GEMS, CUT - POLISHED

AUSTRALIAN TUMBLER gemstones, 8 different polished baroque, identified, suitable for necklace or chain bracelet. \$1.10 postpaid. Or 10 different polished baroque, identified, from around the world. \$1.25 postpaid. Bensusan, 8615 Columbus Avenue, Sepulveda, California.

GENUINE TURQUOISE: Natural color, blue and bluish green, cut and polished cabochons—25 carats (5 to 10 stones according to size) \$3.50 including tax, postpaid. 50 carats (10 to 20 cabochons) \$6.15 including tax, postpaid in U.S.A. Write for folder. Elliott Gem & Mineral Shop, 235 E. Seaside Blvd., Long Beach 2, Cal.

CALIFORNIA DESERT rocks. Gem quality. Polished. Large assortment. One dollar postpaid. Pollard, 12719 Laurel Street, Lakeside, Calif.

ROCKHOUNDS AND craftsmen invited to visit new gemcraft shop, 6276 Adobe Road, Twentynine Palms. Grand opening November 10. Featuring fluorescence.

FIRE AGATE, tumbled, polished, will cut a 13x18 mm. cabochon. \$3 each tax included, postpaid. Fire guaranteed or money refunded. Dimick Mining Co., P.O. Box 1795, Clifton, Arizona.

OPAL, AMETHYST, etc. 10 ringsize stones, ground and polished ready to set, \$5. Opals, deep red, blue, green, golden flashing in all colors of the rainbow, direct from the mine, 15 for \$5. Kendall, San Miguel d'Allende, Guanajuato, Mexico.

GOOD QUALITY polished opalite baroque, assorted sizes, fine for all types jewelry, \$3.50 pound, postpaid. Cody Inn Curio Shop, RR 3, Golden, Colorado.

TUMBLE POLISHED Arizona fire agates, \$2.50 each. Agates, jaspers, \$3.50 pound, plus postage. Apacheland Agate Co., 501 North 17th, Phoenix, Arizona.

OPALS AND sapphires direct from Australia. This month's best buy: black opals from Lightning Ridge. 1 solid black opal cabochon, 1 piece rough black opal cutting material, 1 piece rough black opal matrix. All fine gem material for \$15, free airmail. Send personal check, international money order, bank draft. Free 16 page list of all Australian gemstones. Australian Gem Trading Co., 294 Little Collins St., Melbourne C.I., Australia.

ARIZONA GEMS. Eight different stones, tumble polished and labeled, postpaid 60c. Also tumble polished apache tears and amethyst at \$2.50 per pound while they last. Rock Park, 5050 East Van Buren, Phoenix, Arizona.

ROYAL BLUE shattuckite and beautiful green ajoite \$4.75 per pound. Handmade sterling silver jewelry set with turquoise, opals, agates. Bud's Rock Shop, 1019 Whipple Street, Prescott, Arizona.

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TRADING POST

CLASSIFIEDS

Continued from preceding page

● GEMS, DEALERS

NATIONALLY KNOWN and noted for large choice varieties of gemstone, minerals, Indian artifacts, fossils, handcrafted jewelry, etc., including unusual gifts. Retail and wholesale. Dealers inquiries and suppliers offering invited. The Coles', 551 S.W. Coast Hwy, Newport, Oregon.

DESERT ROCKS, woods, jewelry. Residence rear of shop. Rockhounds welcome. Mile west on U.S. 66. McShan's Gem Shop and Desert Museum. P.O. Box 22, Needles, California.

RED ROCK Shop has minerals, slabs, petrified wood, gifts, curios. Will trade. 2 1/2 miles southwest on U.S. 89A, Sedona, Arizona.

RIVERSIDE CALIFORNIA. We have everything for the rock hound, pebble pups, interesting gifts for those who are not rock hounds. Minerals, slabs, rough materials, lapidary supplies, mountings, equipment, black lights. Why not stop and browse? Shamrock Rock Shop, 593 West La Cadena Drive, Riverside, Calif. Overland 6-3956.

VISIT GOLD Pan Rock Shop. Beautiful sphere material, mineral specimens, choice crystals, cutting materials, jewelry, bolo ties, baroque, spheres, bookends, paperweights, cabochons, faceted stones, fluorescents, jewelry findings, lapidary equipment and supplies, Navajo rugs, sun colored desert glass—gold specimens, our specialty. John and Etta James, proprietors, 2020 North Carson Street on Highway 395 north end of town. Carson City, Nevada.

CHOICE MINERAL specimens, rough and cut gem material, lapidary and jewelry equipment and supplies, mountings, fluorescent lamps, books. Valley Art Shoppe, 21108 Devonshire Street, Chatsworth, California.

GEODES, CRYSTAL. Lined, complete, unbroken, 3" to 5", \$1.50 postpaid. Many have inclusions, most are partially filled with loose, tiny double terminated quartz crystals and clusters. Limited supply. Act Fast. Unusual present for a rockhound. Free list: gems and minerals. The Vellor Co., P.O. Box 44(D), Overland, St. Louis 14, Mo.

● GEMS, MINERALS - FOSSILS

MIOCENE, EOCENE, pliocene fossils; 50,000 shark teeth, 200 varieties intact shells; whale ribs, vertebrae, disks; petrified crabs. Free retail, wholesale listing available. 25 different identified fossils \$3. Malicks, 5514 Plymouth Road, Baltimore 14, Maryland.

FOUR NATURAL staurolites, cross on both sides, for \$1 postpaid. "Animals" assembled from uncut quartz crystals — "Rockhound," \$1.25 each. Five assorted animals, \$5.50 postpaid. Reasoner Rock Originals, Crown King Highway, Bumble Bee, Arizona.

BEAUTIFUL COLOR photos of minerals, crystals and fossils, 3 1/2 x 5 1/2 postcards, 25 different kinds. Set of 25 different cards \$1.25 plus 16c postage. R. Pickens, 610 North Martin Avenue, Waukegan, Illinois.

FOSSILS. 12 different for \$2. Other prices on request. Will buy, sell or trade. Museum of Fossils. Clifford H. Earl, P. O. Box 188, Sedona, Arizona.

OUR NEW list is ready, please write for it. Nice gift for the early Christmas shopper. Continental Minerals, P.O. Box 1206, Anaconda, Mont.

● GEMS, ROUGH MATERIAL

TURQUOISE FOR sale. Turquoise in the rough priced at from \$5 to \$50 a pound. Royal Blue Mines Co., Tonopah, Nevada.

MINNESOTA SUPERIOR agates 1/2 to 1 inch \$1.35 pound postpaid; 1 to 2 inch \$2.50 pound postpaid. 3 polished Thompsonites \$1 postpaid. Frank Engstrom, Grey Eagle, Minn.

TRINIDAD JASPER 10 pounds \$8.50, postpaid. Dealers write for prices on baroque. Roy's Rock Shop, P. O. Box 133, Trinidad, Calif.

WILL TRADE mixed obsidians for agate, or sell gold sheen, silver sheen, olive green banded, spider web, feather, ambers, etc., 60c pound postpaid. Blacks for doublets, etc., 25c pound postpaid. Colorful commons, 35c pound postpaid. Ashby's, Route 2, Box 92, Redmond, Oregon.

ROCK COLLECTORS—attention! Like Surprises? Leave it to me. A mixed box of crystals, fossils, minerals, fluorescent, labeled, or a box of cuttables, chunks and slabs labeled, \$6 each or both for \$11 postpaid. For lapidists who want enough rough to cut on a long time send \$25 and pay the express when it gets to you. The Rockologist, Box 181, Cathedral City, Calif.

CHRYSOCOLLA SLABBED 30c square inch, chalcedony roses 35c pound, rose quartz 50c pound, guaranteed satisfaction. Rogers Bros., P.O. Box 662, 222 West Chapman, Orange, California.

GLASS FOR tumbling, 40 transparent colors at 40c per pound, ruby and flashed, ruby and yellow at 70c per pound. All prices f.o.b. plant, Brock Glass Co., Ltd., Santa Ana, Calif.

COLORFUL AUSTRALIAN fire opal; rough or cut. No deposit. Approvals sent on request. See before you buy. Free list. Write: Walker "Opals Exclusively", 20385 Stanton Ave., Castro Valley, California.

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FINE RESERVATION-MADE Navajo, Zuni, Hopi jewelry. Old pawn. Hundreds of fine old baskets, moderately priced, in excellent condition. Navajo rugs, Yei blankets, Chimayo homespun, pottery. A collector's paradise! Open daily 10 to 5:30, closed Mondays. Buffalo Trading Post, Highway 18, Apple Valley, California.

AUTHENTIC INDIAN jewelry, Navajo rugs, Chimayo blankets, squaw boots. Collector's items. Closed Tuesdays. Pow-Wow Indian Trading Post, 19967 Ventura Blvd., East Woodland Hills, Calif. Open Sundays.

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INDIAN PHONOGRAPH records, authentic songs and dances, all speeds. Write for latest list: Canyon Records, 834 No. 7th Avenue, Phoenix, 1, Arizona.

INDIAN ARTIFACTS, mounted horns, buffalo skulls, pottery, Navajo rugs, curios, list free. Thunderbird Trading Post, highway 80 at Brazos River, Millsap, Texas.

SELLING 20,000 Indian relics. 100 nice ancient arrowheads \$25. Indian skull \$25. List free. Lear's, Glenwood, Arkansas.

AMERICAN INDIAN color slides. Superb museum specimens covering archeology and ethnology of Western Hemisphere. Excellent for teachers, artists, collectors. Free list. American Indian Museum, Broadway and 155th, N.Y. 32.

NAVAJO RUGS, genuine, direct from trading posts. Large selection. From \$11 to \$660. Crystals, Two Grey Hills, Yei; single, double saddle blankets. Vegetable dyes and anilines. Perfect Christmas gift for man's room, den, or children's room. Desert Magazine Craft Shop, Desert Magazine Building, Palm Desert, California. Open 9 a.m. to 6 p.m. seven days a week after October 15.

FINEST RESERVATION-made Zuni, Navajo, Hopi jewelry. Old Pawn, Navajo rugs, Chimayo blankets, baskets, pottery, squaw boots. We appraise, buy and sell Indian jewelry, Navajo rugs and basket collections. Send for brochure. The Indian Room, 1440 South Coast Highway, Laguna Beach, California.

APACHE TRADING Post, specializing in fine Indian pre-Columbian artifacts, pottery, beads, baskets, stone implements, fetishes, etc. No lists. George W. Stuttle, Route 3, Box 94, Angeles Forest Highway, Palmdale, California. Windsor 7-2743. Open Sundays only.

10 WARPOINTS \$1.50; 6 arrowheads \$1.50; 4 birdpoints \$1.50; 2 spearheads \$1.50; 2 gem-points \$1.50; 24" strand trade beads \$1.50; 4 photographs framed relics, idols, beadwork, masks, rugs, pipes, baskets \$1.50. (Refunded with \$10 order.) Paul Summers, Canyon, Texas.

INDIAN RELICS! Selling ancient arrowheads, tomahawks, pipes. Free photo-illustrated catalog. Al's Relics, Dept. D, Box 393, Bellmore, New York.

● JEWELRY

GENUINE TURQUOISE bolo ties \$1.50, 11 stone turquoise bracelet \$2. Gem quality golden tiger-eye \$1.75 pound, beautiful mixed agate baroque \$3 pound. Postage and tax extra. Tubby's Rock Shop, 2420 1/2 Honolulu Ave., Montrose, California.

JEWELRY PARTS. Why pay retail? New catalog lists bracelets, sweater clips, bails, cuff links, bell caps, cement, earrings, jump rings, chains, neck clasps, key chains, bola slides, tips and cords, belt buckles, as well as ring mountings, pendants, brooches, silver, rock crystal stars, synthetic stones, bargain lot offers . . . over 500 items. All sold on money-back guarantee. Send 4c stamp to cover postage on your free catalog. Rock Craft Folks, Box 424D-6, Temple City, California.

CHOICE AMETHYST or apache tear dangle-type earrings, sterling silver, gift boxed. \$2. Yucca Bill, Box 958, Yucca Valley, California.

ALUMINUM CHAINS! Dealers, write for wholesale price list on our fabulous line of non-tarnishing aluminum chains. Include \$1 for samples postpaid. Please use letterhead or state tax number. R. B. Berry & Company, 5040 Corby Street, Omaha 4, Nebraska.

LADY'S SOLITAIRE birthstone ring, 6 1/2—7 mm, round brilliant synthetic stone in sterling silver mounting. This elegant ring is perfect for all occasions. State month and size (whole sizes 5-9). Only \$7.50, tax, postage included. Satisfaction guaranteed. Worldwide Gems & Minerals, 1628 11th Street, Sacramento 14, Calif.

UNIQUE LOVELY bracelets of ten different identified gems set flat on untarnishable gilt H.P. mounting. Choice of "Gems of the World" or "Western Gems," \$3 each. Also choker-style necklaces to match, \$3.75 each. Tax, postage included. Bensusan, 8615 Columbia Ave., Sepulveda, California.

FREE PAIR earrings with purchase of eight stone bracelet or three stone necklace—\$2.98 each. Choice of apache tear or amethyst. Hobbies Unlimited, Box 145D, Sunland, California.

GARNETS FOR Christmas and January birthdays, bracelets \$3, chokers \$3.75, earrings \$1.50, matched set gift boxed \$6.50. Rough 15 for \$1, tumbled \$2 ounce. Selected star stones. Tupper Jones, Wenden, Arizona.

● LODGES, MOTELS

MELODY LANE Apartment Motel, 6259 Adobe Road, P.O. Box 66, Twentynine Palms, California. All electric, air-cooled, trees and patio, opposite post office, near super-market. Day, week or monthly rates.

ROCK HOUND headquarters: Moqui Motel, Escalante, Utah—on Highway U. 54, phone MArket 4-4210, Dyna and Mohr Christensen. Pack and Jeep Trips by appointment.

● MAPS

SECTIONIZED COUNTY maps — San Bernardino \$3; Riverside \$1; Imperial, small \$1, large \$2; San Diego \$1.25; Inyo \$2.50; Kern \$1.25; other California counties \$1.25 each. Nevada counties \$1 each. Include 4 percent sales tax. Topographic maps of all mapped western areas. Westwide Maps Co., 114 West Third Street, Los Angeles 13, California.

GHOST TOWN map: big 3x2 feet. California, Arizona and Nevada, with roads marked. Plus Treasure catalogue 100 items. \$1, or American Treasure Hunter's Guide \$2. Foul Anchor Archives, DM, Rye, New York.

FABULOUS MINERAL Guide and map of Western Mexico and Baja. For map and guide send \$2 to Mineral Guide, Box 24232, Los Angeles 24, California.

ROUTE MAP Pacific Crest Trail, 2153 miles Canada to Mexico through 22 National Forests and 6 National Parks in Washington, Oregon and California. 20-page folder \$1. W. Rogers, 2123 South Park Drive, Santa Ana, California.

BURIED TREASURE and lost mine map, 72 authentic California locations, 19x24, beautiful four-color with free gold nugget, \$2 postpaid. 100-years-old Indian trade beads, approximately 24" strand, \$4, 40" \$6.50 postpaid. See famous old Gold Rush Museum, P.O. Box 46, Amador City, California.

● MINING

NEW! METALS and Minerals Buyers Guide for 1960. Market values—who buys what and where. A must for every serious miner or prospector. Price only \$2 postpaid. Comprehensive Chemical Co., Box 41D, Rancho Cordova, California.

ENGINEERS, PROSPECTORS, geologists. Locate boron, lithium, strontium, uranium and other valuable minerals with the new always ready fluorescent mineral detector. Detector operates in daylight, uses no batteries, fits in shirt pocket and eliminates dark box. Is unsurpassed for open pit uranium mining operations. Price only \$12.50. Free brochure. Esington Products and Engineering, Box 4174, Coronado Station, Santa Fe, New Mexico.

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\$1 FOR gold areas, 25 California counties. Geology, elevations. Pans \$3, \$2.50. Poke \$1. Fred Mark, Box 801, Ojai, California.

BOOK, GOLD Panning For Profit, \$1.50. Circular free. Frank Wyss, 1420-D North 7th Street, St. Joseph, Missouri.

NATURAL PLACER gold nuggets and grains, \$50 troy ounce. Better price on quantities. Cashier's check or money order. Marcum Bielenberg, Avon, Montana.

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RARE UNCIRCULATED Carson City mint dollars, 1878, 1882-83-84-90-91, \$10 each. 100-page catalog 50c. Shultz, P.O. Box 746, Salt Lake City 10, Utah.

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CACTI—MANY varieties of specimen plants only. Send for list. Rosso's Cactus Nursery, 25399 Hiway 99, Loma Linda, California.

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FIRST TIME available, Hollywood and Los Angeles 8 mm. color home movies, beautiful natural color, sharp focus, no artificial titles, A & B editing, can be sound striped. Also Las Vegas, Carmel and Disneyland, \$5.95 postpaid USA. Kaytee, Dept. DM, Box 2967, Hollywood 38, California.

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COLOR SLIDES. Re-live your vacation trips. 3000 travel Kodachromes, parks, U.S., foreign, nature, etc. Free list (sample 30c). Send today. Kelly D. Choda, Box 15, Palmer Lake, Colo.

BEAUTIFUL LANDSCAPE paintings made from your color slides. Sell to tourists. Sample 15x18" canvases only \$21. Send slide to Studio, Box 861, Fort Huachuca, Arizona. \$3 deposit on C.O.D. orders.

DEATH VALLEY colorslides, also Rhyolite, Virginia City, desert scenes, Bodie. Sample and list 25c. Longstreet, 5453 Virginia, Hollywood 29, Cal.

● REAL ESTATE

50 ACRES only three miles from city of Coachella in Coachella Valley. Sacrifice at \$5000. Write to: Don Bleitz, 1001 N. McCadden, Los Angeles 38, Calif.

\$25 DOWN, \$10 month buys level Nevada 5-acre lot. Wide streets, 7 miles to Winnemucca Airport, highway 40. Guaranteed title. Full price \$995. Henion, 2086 East Colorado, Pasadena, California.

NEAR LAKE Isabella, 2 1/2 acre lots in scenic, green, fertile, tranquil Kelso Valley, \$2950 at \$50 down, \$35 per month, or \$2500 for cash. Call or write for free brochure. Salesman on premises on weekends. Weldon Valley Ranchos, 2441 E. Locust Ave., Orange, Calif. Kellogg 2-1361.

CHOICE 207 acres, six miles north of Inyokern on old Highway 395. 160 acres fenced, 110 acres in alfalfa, yield 1 1/2 to 2 ton per acre, seven cuttings year. 1200 gpm well. Completely equipped. Also nice home. Make offer. L. P. Soulsburg, Dueleburg Farms, Route 1, Box 20, Inyokern, California.

FOR INFORMATION on desert acreage and parcels for sale in or near Twentynine Palms, please write Silas S. Stanley, Realtor, 73644 Twentynine Palms Highway, Twentynine Palms, California.

NORTH OF Barstow: 50 acres, \$60 per acre, good terms. This level to rolling land is located on road in highly mineralized area. Robert L. Shaw, Wholesale Land Broker, 5034 Verdun Avenue, Los Angeles 43. AX 1-9188.

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FOR SALE: rockhound home, two bedrooms, fireplace, covered patio with fireplace, garage, shop, hobby room, etc. Call PO 1-0760; write: R. A. Mokrcek, 5621 Cartwright Avenue, North Hollywood, California.

FOR SALE: Tucson, two-bedroom house looking out to desert, attached carport, Westinghouse kitchen, open-plan living. \$28,500. 10% down. Write: B. Johnson, 1966 South University Blvd., Denver 10, for details.

MORE CLASSIFIEDS ➤

TRADING POST

CLASSIFIEDS

Continued from preceding page

ONE ACRE near Salton Sea, near Box Canyon, lovely soft well water, private road, shade and seclusion, total price \$5000. Write Ronald L. Johnson, Box 162, Thermal, California.

● WESTERN MERCHANDISE

DESERT TREASURES, primitive relics, purple glass, gem stones, paintings, rock trips, information on Last Chance Canyon. Visit Roberta's in the ghost town of Garlock, 12 miles east of Red Rock Canyon Highway 6, via Randsburg road, or 8 miles west of Randsburg and Highway 395. Mail inquiries answered. Roberta's, Box C, Randsburg, California.

MAC'S ORIGINAL timberline weathered wood. Finished table or what-not shelf pieces, 6 for \$10 postpaid. Write for prices on patio pieces. Cody Inn Curio Shop, RR 3, Golden, Colorado.

GHOST TOWN items: Sun colored glass, amethyst to royal purple; ghost railroads materials, tickets; limited odd items from camps of the '60s. Write your interest—Box 64-D, Smith, Nevada.

LIGHT AMETHYST (Desert Hue) glass made in molds 50-years old, pressed by old time method. Sugar bowls, old fashioned glasses, creamers, iced teas, wine glasses, etc., butter dish and cover, mustard and cover, puff box and cover at \$1 each. Candy dish and cover and flower vases at \$1.50 each. Also available in crystal glass which will turn amethyst in sun in approximately 12 months. All prices f.o.b. plant, Brock Glass Co., Ltd., Santa Ana, California.

LARGE CHUNKS—2 lb. to 25 lb. desert glass, was crystal but now turning in sun, for patios and flower arrangements. All prices f.o.b. plant, Brock Glass Co., Ltd., Santa Ana, Calif.

FOR SALE: My collection of sun colored glass, antiques and unusual pieces. Mrs. A. E. Wycokoff, 11501 Davenport Road, Auga Dulce, Cal.

● MISCELLANEOUS

GIFTS OF distinction, practicality. Artistically arranged desert inclusions in clear plastic. Pen holders, paper weights, jewelry. P.O. Box 277-D, Yucaipa, California.

PLASTIC EMBEDDING for fun and profit, no oven. Make beautiful jewelry, decorative panels, science specimens castings. Catalog 25c, Natcol Plastics, Box 444, Yucaipa, Calif.

EARTHWORMS, LUSH gardens, fine lawns, good bait, Send \$1 for instructions and 200 P.A.X garden and bait worms. Large California native crawlers \$3.50 per 100. Patton Worm Farms, Highland, California.

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ARTIST SUPPLIES of all kinds. Oil colors, water colors, brushes, etc. Send us list of your needs. R.C. Color Store, 1834 South Hill, Oceanside, California.

BOOK—20 formulas cosmetics, perfumes, etc., big profits, all rights \$5. Send money to: P.O. Box 1868, Hollywood 28, California.

BAJA CALIFORNIA (Mexico) jeep trip planned to LaPaz and return, first two weeks in January. Interested parties contact Dr. W. Hamshaw, 9940 Orr and Day Road, Santa Fe Springs, California.

SIMULATED ENGRAVED business cards \$3.95 and \$4.95 per thousand. Write for samples. Tumble polished baroques \$2.50 per pound postpaid. Doney's Printing & Rock Shop, Box 246, Lucerne, Lake County, California.

LIVE CHRISTMAS trees, beautiful, fresh, long lasting. Cut your own. Tag now—two to ten feet—\$1 foot. Holland's new plantation, none like it in Southern California. Phone: 01 8-3947. Address: Stetson and Sanderson, Hemet, Calif.

Hard Rock Shorty of Death Valley



"Taint fair to call us Death Valley folks 'characters,'" Hard Rock Shorty was complaining to the newspaper reporter from San Bernardino. "Wot's thet word supposed to mean, anyhow? Ever'body up here with whiskers a 'character'?"

"I didn't mean it in a derogatory sense," the newspaperman apologized, fully aware that it would not pay to offend Death Valley's chief character. "A character is a pure type; a three-dimensional human being; a unique or extraordinary individual."

"Phooey t' all them fancy words," snorted Shorty. "Explain in simple terms why you passed off Big Bert as a 'character' in th' Sunday paper."

Just then they looked up and saw Big Bert slowly come into view on the crest of the long slope leading down to the Inferno Store.

"Speak 'o th' devil," said Shorty in a reverent tone.

The fat man hesitated a moment on the ridge, and then started down the hill, jogging at first but soon flying full tilt by force of momentum—his hat flying, his arms flaying and his overalls splitting down the back a little more with each bound.

"Well, what would you call him?" the reporter asked Shorty, his eyes glued to the remarkable hillside apparition.

"I'd call Big Bert wot he is: 'Death Valley's Laziest Human,'" answered Shorty without hesitation. "Thet's factual reporting with no fancy flaps!"

The newspaperman shot a hard glance at Shorty. "Lazy!" he cried. "A 300 pound man running 300 miles an hour down a 30-degree slope, and you call that lazy?"

"Sure," replied Shorty. "Big Bert always comes down th' hill thataway—too danged lazy to hold back."

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(See story on page 22)

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